CCS – GENERAL CHEMISTRY (CHEM 1412) CRN 33742 (8/25 to 12/14) Fall 2014
Instructor: Dr. Batamo; e-mail: shuhsien.batamo@hccs.edu; tel. 713-718-2544, Office: LHSB 401
T (8:30 – 11:30 a.m.) LHSB 408, Lab Room; Thr (8:30 – 11:30 a.m.) LHSB 414, Lecture Room.
Office hours: M, T, W, Th 11:30-12:00 noon by appointment only.

Important Message from HCCS to All Students:
"Students who repeat a course three or more times may soon face significant tuition/fee
increases at HCC and other Texas public colleges and universities. Please ask your
instructor/counselor about opportunities for tutoring/other assistance prior to considering course
withdrawal, or if you are not receiving passing grades."

American Disability Act: The Ability Office (formerly known as the Disability Support Services
Office) at HCC reminds faculty that they are required to include the following statement on all
their class syllabi: Any student with a documented disability (e.g. physical, learning, psychiatric,
vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the
Disability Services Office at the respective college at the beginning of each semester. Faculty is
authorized to provide only the accommodations requested by the Ability Office.

For questions, contact Donna Price at 713.718.5165 or the Disability Counselor at your college. To
visit the ADA Web site, log on to www.hccs.edu, click Future Students, scroll down the page and
click on the words Disability Information.

ADA Counselors:
Jette Lott, ADA Counselor – Central, 713/718-6105, jette.lott@hccs.edu
Senta Eastern, ADA Counselor – Central, 713/718-2548, senta.eastern@hccs.edu

Non-ADA Advisors/Counselor:
Academic Advisor: Ms. Sheila Villegas 713-718-6131
Faculty Advisor: Ms. Yvonne Hernandez 713-718-2511 for tutoring.
Counselor: Mr. Luis Trevino 713-718-6123
Security Office/Campus Police: 713-718-8888

Academic Calendar (Regular Term/16 weeks):
http://www.hccs.edu/district/events-calendar/academic-calendar/fall/fall-reg-term/#d.en.183098

Title 9:
HCC is committed to provide a learning and working environment that is free from discrimination
on the basis of sex which includes all forms of sexual misconduct. Title IX of the Education
Amendments of 1972 requires that when a complaint is filed, a prompt and thorough
investigation is initiated. Complaints may be filed with the HCC Title IX Coordinator available at
713 718-8271 or email at oie@hccs.edu.

HBS5 Summary:
Please see separate posting in the Learning Web.
**HSI STEM Research Fellowship with Stipend Application:**
Please see posting in the [http://www.hccs.edu/stemresearch](http://www.hccs.edu/stemresearch)

**Texas STEM Scholarship Application:**
http://www.hccs.edu/district/students/stem--science-technology-engineering--mathematics/texas---stem/

**Online OWL Learning Platform (access code required):**
Please see separate posting in the learning web.

**Free Tutoring by:**
1. Learning Emporium: SJac 384. Phone: 46356 (This is an internal line which you must dial from campus phone. You cannot access it off the campus). Schedule: Monday to Thursday from 7 a.m. to 6 p.m. and Friday from 8 a.m. to 4 p.m.
2. **Online (by other Colleges):** Available 24 hours a day, 7 days a week, 365 days a year. See HCC Home page for details or visit [www.hccs.askonline.net](http://www.hccs.askonline.net)

**Important College Policy: Final Version – 06/15/11**
Policy: Please visit the below link for details, especially page 2, at
http://www.hccs.edu/hcc/System%20Home/Departments/Financial_Aid/Financial%20Aid/About%20Financial%20Aid/pdfs/Revised%202011-12%20SAP%20Policy.pdf

- **Withdrawals ("W" grades)** – Courses with a grade of “W” (Withdrawn) will not be calculated in the GPA or considered as credits successfully completed, but will be counted as credits attempted.
- **FX Grade**—the FX grade will calculate into your GPA as an “F”, however, it may also be treated as a course for which you have withdrawn or did not successfully complete.

**FX Grade**—the FX grade will calculate into your GPA as an “F”, however, it may also be treated as a course for which you have withdrawn or did not successfully complete.

**Repeat Courses** – Students may repeat a course and receive financial aid if the original grade is not successful (F, I, W, X, FX or IP). A grade of “D/1.0” is successful for financial aid purposes.

**Incomplete ("I" grades)** -- A grade of “I” (Incomplete) indicates that a student has not finished all course work required for a grade and is included in the cumulative credits attempted. An incomplete grade will not count as hours passed until a final grade is posted in the Registrar’s Office. If a student’s —”I” grade changes during a semester, it is the student’s responsibility to inform the financial aid office of the change. If the change of grade will affect the student’s financial aid eligibility, the financial aid office will then do a recalculation during the semester. Otherwise, the change of grade will not be factored into the overall completion rate until the next increment of evaluation.

**EGLS3** – Evaluation for Greater Learning Student Survey System
At Houston Community College, feedback is necessary professors believe that thoughtful student feedback is necessary to improve teaching and learning. During a designated time, you will be asked to answer a short survey of research-based questions related to instruction. The anonymous results of the survey will be made available to your professors and division chairs for continual improvement of
instruction. Look for the survey as part of the Houston Community College Student System online near the end of the term.

Message from HCC Police Department for Emergency Response and Safety Prevention:
(1) Tel. 713-718-8888; when use campus phone, please dial 8-8888.
(2) Active Shooters Video: please see http://www.youtube.com/watch?v=5VcSwejU2D0

From Chemistry Discipline:
Chemical Safety Video: please see http://vimeo.com/6170550

Important Message from Instructor to All Students:
This syllabus serves as a binding contract between students and the instructor. Any rule, grading and grade calculation are solely based on what stated in the syllabus.

1. If student is absent, tardy, or early departed from the class, s/he is solely responsible for the consequence. This includes announcement or change of schedule of assignment exam. No make-ups will be granted due to absence. The online entry for attendance is for 3-hour block and thus students who do not attend for the full section will not be given for the full 3 hours. Any excused and unexcused absences are all considered as absence.

2. Cell phones and laptops: Usage is strongly discouraged in the classroom and lab room. All cell phones must be turned off during an examination and should be at a silent mode in class (lab and lecture). If your cellular phone is on or rings during the exam, you’ll automatically receive a zero for that exam. Usage of laptops is strongly discouraged in this class. If you must use it, please LEAVE the lecture or lab room. Laptops are only allowed to take notes, not to surf the internet. Do not study material from other class in this class.

3. Do NOT bring consumer culture into this class. The instructor is not here to give student what he/she wants but rather to help student obtain what he/she needs. Any faculty member who gives the student an "A" regardless of his/her performance primarily because it is what will make student happy is doing the student and other students a disservice.

4. Student’s Sole Responsibility for Withdrawal: Students who (1) missed the first week of class or (2) missed the tuition and fee payments by deadline are dropped by the College Registrar automatically. It’s student’s responsibility to get re-instated. However, if you missed two weeks of the class, the instructor will not re-instate you back to the class even if you had asked. You can enroll in the second start class.

Students simply stop coming to the class WITHOUT officially dropping the class will receive an FX from this course. Instructor does not drop students from class due to student’s excessive absence or unsatisfactory performance.

If you need to drop the class for any reason, you can do it by either of the following methods prior to 4:30 p.m. October 31, 2014 across all HCC campuses:

1. Completing an official withdrawal form at any HCCS campus.
2. Online withdrawal from your HCC student account. Be sure to print out a copy for your record.

3. Send a letter requesting withdrawal to Registrar, Houston Community College System, P.O. Box 667517, Houston, TX 77266-7517. The withdrawal will be effective the date of postmark.

4. Fax a letter of withdrawal to 713-718-2111.

5. **Tardiness:** The lab door will be locked after 30 minutes of printed class starting time. If you can’t be at the class on time or in time, consider register a late-start class to better meets your schedule. *There will be penalty for being late and not cleaning up your class room or lab room/apparatus and trash.*

6. **Early Departure:** Please sit near the (exit) door if you do not plan to stay for the entire class time or simply do not come if you can not lift up your head due to sleepiness. If you must leave, please do NOT make a scene. *Learning is a personal choice and also a group activity: the behavior of each person in class will in some way or the other affect the learning outcomes of the other students.* Zipping your backpack prior to dismissal will influence other students to follow.

7. **Questions are always welcome!** Do not use foul languages in this class when you do not agree with the instructor or when you see the grade which you do not like. Wait until you calm down and then discuss with the instructor. *The time to be concerned about your grade is between week 1st and prior to October 30, the day before the Last Day for Administrative and Student Withdrawal. The instructor will only award student what he/she actually earned; simply put: no extra credits, bonus points and curves will be used in evaluation of student’s letter grade.*

8. **No late assignments are accepted.** All assignments for labs are due and checked on the date the experiment is performed. *Plagiarism,* including copying word-for-word and photocopying the materials, is considered as academic dishonesty and is subjective to penalty by receiving a zero for that assignment.

**Early Alert Program:**
For years, instructor has been participating in the Early Alert Program offered by the Counseling Department. Thus, a weekly or monthly attendance and exam records will be forwarded automatically to the Counseling Department **without** student’s consent.

**Prerequisite:** One-year high school chemistry or either one of the chemistry courses (CHEM 1306, CHEM 1405 and CHEM 1413) and Algebra 1314. *Student taking this class without proper prerequisites is at his/her own risk.* Should you have any questions, please refer to Chemistry FAQs in Southwest College website.

**Course Description & Course Intent:** Basic Concepts of chemistry presented for students intending to major in one of the physical or medical sciences (chemistry, physics, medicine, etc.), engineering or mathematics. Topics include properties of solutions, chemical kinetics, chemical equilibrium, acids and bases, acid-base equilibrium, solubility and complex ion equilibria, spontaneity, entropy, and free energy, electrochemistry, nuclear chemistry, simple organic
compounds. This course is intended for students who need general college level chemistry in preparation for higher-level science courses in their respective curricula. Chemical concepts and exams are emphasized from a mathematical approach.

Textbook, lab manual, and a scientific calculator are required:
  -- Custom version: Available at any HCC bookstore
  -- Full version:
  -- pdf version: from any search engine
- Scantrons (FORM NO. 882-E; width: 4.25” and height: 11” or half of the letter size).
- Scientific calculator (any model; a basic model is TI-30; less than $12 at Walmart; of course, you can use a more expensive one like TI-89)

The following are optional:
- Safety goggle (available in the lab),
- Lab coat
- Study Guide Study Guide for Zumdahl/Zumdahl's Chemistry
- Student Solutions Guide (only the odd numbered answers which are also provided in the appendix of the textbook). You can check the availability at the Reserved Desk of the College Library at any HCC campus. You can sometimes get answers by any search engine https://www.google.com/?gws_rd=ssl&q=zumdahl+chemistry+9th+edition+answers

Central College Physical Science Department Rules and Regulations: Contact Department Chair or visit the website of Physical Sciences Department, or see attachment for information. All cell phones should be turned off during examinations and should be at silent mode during lecture sections. No rest room use unless it’s an emergency during the test. No recording in any format. Electronic devices are not allowed except when using it to take the notes.

Attendance and Tardiness Policy and Student Responsibilities: Students are expected to follow the rules established by the State and the College printed in Annual Schedule of Classes. Students are solely responsible for making up materials missed due to their tardiness, early departure, and absence, and are expected to study and sign roll sheets every time in class.
**Academic Honesty Policy**: Zero tolerance for academic dishonesty. Student who is caught cheating will receive a grade of zero for that exam or lab report with no exceptions and may be administratively withdrawn from the class. The student will be reported to the College for discipline action.

**Exam Policy**: Please bring your Scantron, pencil, eraser, calculator and blank scratch paper to each test/exam. Write the version(s) on your Scantron (FORM NO. 882-E). No make-up exams are allowed and thus students are allowed to drop the lowest lecture exam given by instructor. Should any make-up be granted, it must be an emergency or major medical and the student must provide the third party’s document for record. **System Final Exam is mandatory and cannot be dropped**. Thus missing the Final or inadequate preparation for it will have adverse consequence affecting your grade. **No extra credits, bonus, or curve will be used in grading and thus your grade will reflect how well you have understood and fulfilled the requirement in the class.**

**Lab Policy**: No make-up labs are allowed. Students must watch safety video during the first lab of class. Students who missed the Videotape: Starting with Safety reserved in the library must take the written Safety exam to meet the requirement. This video is also available at [http://vimeo.com/6170550](http://vimeo.com/6170550). In lab section, there will be point deduction for tardiness (15 min. or longer), early departure without finishing the lab or instructor’s approval, and not cleaning up the lab benches and hoods, dumping chemicals in sinks/trash cans), and safety violations as well as excessive chemical usage.

**Grading Policy**: Your letter grade will be based on how well you have met the requirement and grading policy. You are strongly encouraged to do your homework and practice exams. **Lecture portion: total 75%; Lab portion: total: 25% ==> Total 100%.**

**Breakdown:**

**Lecture:**
- 2 best out of 3 Lecture Exams (drop the lowest) 50%
- 1 Comprehensive System Final 25%

**Quizzes**: 10 minutes for each quiz
- One out of three questions shown with * from each chapter is tested for ten chapters (see question shown in * at end-of-chapter exercise; no makeup allowed): 10%

**Lab:**
- 2 Lab exams
  - Safety rules and chemical apparatus 3%
  - Lab reports and attendance 12%
- Total 100%

For any unpredictable or uncontrollable absence due to illness or work, you must bring the third party’s documentation like physician’s note or letter from employer to avoid point deduction of
your lab. No grade will be released over the phone or by email or to your friend, classmates or spouse even if you are taking the same class. All tests will be returned for viewing and for any grading error during the following class and must be returned for grade recording. Failure to return the test will result in recording as a zero for the test.

Homework assignment (end-of-chapter exercises) is neither collected nor graded. It’s solely for student practice only. Some will be discussed in the class or be listed in the practice exams.

Per Chemistry Discipline Committee suggestion/guideline in promoting EGLS3 to meet the response requirement by the College, there will be 5 bonus points added to the Comprehensive System Final Exam should the student prints out and turns in the printer receipt showing all courses enrolled are evaluated.

Final Average is rounded to a whole number according to method listed in chapter 1 to assign letter grade. Grading Scale: 90-100 = A; 80-89 = B; 70-79 = C; 60-69 = D; Below 60 = F.

Tips for Learning Chemistry: Chemistry is a math-based subject, which requires conceptual understanding and application, and is not a subject that you can learn or master passively. Memorization does not work well in Chemistry unless it’s for nomenclature. Chemistry is best learned through doing. Listening to lecture attentively is essential for mastery of the course. CHEM 1411 is difficult and it’s a math-based course, which requires students putting more effort than what they did in Chemistry 1305, 1405 or 1413. An A or B from the above named course does not guarantee an A or B from this course unless the student shows his/her due effort. Usually it requires 20 or more hours a week outside the classroom to study and practice the materials learned in the class. Students can easily fall behind if they do not keep up daily/weekly study, and/or if they fall asleep in the class, and/or miss classes, being tardy or have early departure. Scores from exams speak for your readiness and preparation for the class. Remember that reading solutions is different from solving problems and doing homework and practice exams yourself. To study effectively, you should read the assignments before attending lectures.


Note: The lab number listed in the syllabus does not correspond to the experiment number listed in the lab manual. Student must examine the titles of labs. Pre- and post-laboratory questions are very closely related to your lecture materials. You can use them to examine your understanding of lecture.

Chapter 22: partial.

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Exercises from the end-of-chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>29, 32, 35, 37, 38, 43*, 46, 49, 51, 65, 66*, 79, 80*, 81, 85</td>
</tr>
<tr>
<td>12</td>
<td>13, 20, 23, 26, 27, 29, 33*, 35, 45, 47, 53, 58, 61*, 62, 63, 69, 75*</td>
</tr>
<tr>
<td>13</td>
<td>23, 25, 27, 29, 31, 33, 35, 37, 39, 43, 45, 47*, 49, 51, 59, 63*, 64, 65, 67*, 71</td>
</tr>
<tr>
<td>14</td>
<td>37, 41, 43, 44, 45, 47, 51, 53, 61, 63, 65, 67, 73, 77*, 81, 83, 85, 87, 90 a, 93, 97, 99,</td>
</tr>
</tbody>
</table>
Date   TOPICS/ACTIVITY; T: LHSB 414; Thr.: LHSB 408
8/28   Chap 11.
9/2   T   Safety video quiz including the chemical apparatus; chap 11 (finished)
       (please see CHEM 1411 Practice Exam folder).
9/4   Chap 12.
9/9   T   Chapter 12 (finished).
9/11  Lab 1: Exp’t 3: Boiling Point Evaluation of a Solution.
9/16  T   Chap 13
9/23  T   Chap 13 (finished)
9/25  Chap 14
9/30  T   EXAM I (Chap 11-13), two hours only (9:00-11:00 a.m.)
10/7  T   Chap 14 (finished)
10/9   Chap 14 (finished)
10/16  Chap 15 (finished)
10/21  T   Chap 16.
10/23  Chap 16 (finished).
10/28  T   Exam II (Chap 14-16); two hours only (9:00-11:00 a.m.)
10/30  Chap 17
11/4  T   Chap 18
11/6   Lab 5: Exp’t 7: Determination of the Dissociation Constant $K_a$ of a Weak Acid.
11/13  Chap 19

11/18 T Lab 7: Exp’t 17: Synthesis of Aspirin.
11/20  Chap 23.

11/25 T Exam III (Chap 17 to 19): two hours only (9:00-11:00 a.m.)
11/27  Thanksgiving Holiday.

12/2 T Chap 22
12/4  System Final Exam Review (Ch 11 to 19 and 22)

12/9 T Study day. No class.
12/11  System Final Exam (Chap 11-19, and 22): two hours only (9:00-11:00 a.m.)

December 15: Graces Due by 12-noon. Grade Available to Students once it is posted.

SCHEDULE IS SUBJECTIVE TO CHANGE WHEN NECESSARY. HOWEVER, THIS IS A RARE SITUATION.