CHM2096 - Spring 2014 - Korolev

Lectures: MWR 10th Period in Flint 50 Discussion sections: Tuesdays

INSTRUCTOR: Maria Korolev

Email: <u>korolev@chem.ufl.edu</u> Office hours: T 4th and F 7th & 8th Periods in Flint 251

REQUIRED MATERIALS:

<u>I>clicker response system</u> – using any model i>clicker remote or i>clicker GO on your smartphone <u>Silberberg 6e Smartbook access</u> – provided for free with our course

COURSE SCHEDULE (this schedule is tentative and may be updated during the course)

| Topic | Chapte | r Week(s) | Dates |
|--------------------------|-------------|-----------|-----------|
| Chemical Equilibrium | 17 | 1 | 1/6-1/9 |
| Acids and Bases | 18 | 2 & 3 | 1/13-1/23 |
| Ionic Equilibria | 19 | 4 | 1/27-1/30 |
| Activity I | 1/21 – 2/11 | | |
| Exam I | 2/3 | | |
| Thermodynamics | 6 | 5 | 2/5-2/6 |
| Thermodynamics | 20 | 6 & 7 | 2/10-2/20 |
| Activity II | 2/11 – 3/11 | | |
| Exam II | 2/24 | | |
| Redox Chemistry | 4.5/4.6 | 8 | 2/26-2/27 |
| Spring break | | 9 | |
| Electrochemistry | 21 | 10 & 11 | 3/10-3/20 |
| Activity III | 3/11 – 3/31 | | |
| Exam III | 3/24 | | |
| Main Group Chemistry | 22 | 12 | 3/26-3/27 |
| Transition Metal Chem | istry 23 | 13 | 3/30-4/3 |
| Nuclear Chemistry | 24 | 14 | 4/7-4/11 |
| Exam IV | 4/14 | | |
| Special Speakers? | | 15 | |

Final Cumulative Exam 4/28 7:30am-9:30am (this is not changing)

COURSE EXPECTATIONS:

This course has the same content coverage of CHM2046 but includes an engineering component in the form of hands-on activities. The <u>activities</u> will be done as groups during discussion sections with the guidance of teaching assistants, and will count toward the overall course grade. Students will also be expected to learn chemistry content in and outside of lectures via the Smartbook and regularly scheduled classes. <u>Clicker</u> questions will be used to assess learning during class, and <u>Smartbook</u> points will assess the learning done outside of class. Clicker and Smartbook points will count as one total, and they can be used to compensate for each other. There will be assigned <u>homework</u> during the course, but it will not be graded. This homework will be crucial to succeeding on exams. <u>Progress exams</u> and a <u>cumulative final</u> will be the main assessment tools of this course.

ACTIVITIES:

Part of your grade will be determined by engineering activities done during your discussion sections. There will be three projects spread over the semester that will relate to material covered in lecture. Each project will be done over three weeks to be done both during discussions and outside the discussions. You will be graded on the scientific merit of your work, your group presentation, and your individual effort during the projects. The former will be graded by teaching assistants, and the latter will be done through peer evaluations. More of the details of the activities will be discussed during the 1st discussion meeting on January 14th.

These activities are part of an initiative to improve this section of general chemistry, and are tied to a research grant. Due to this, you will need to complete a consent form as well as pre- and post-semester surveys. Your compliance with this will be worth points that contribute to your overall activities score.

CLICKERS:

The i>clicker response system will be used in class to engage participation from everyone and to provide feedback for me during the class. Each student's participation is valuable and therefore clicker use will be incorporated into the course grade. One point will be awarded for each clicker question for participation. Additionally, one point will be awarded on questions for accuracy. In order to receive credit for the clicker points, you will need to register your device online. It is your responsibility to check that you have registered your device properly, and that you are receiving points. I will update the gradebook periodically, so do not wait until the end of the course to check for issues. All students need to be registered by January 30th. Also, please note that the academic honesty policy applies to this.

SMARTBOOK:

This semester we will be trying out a product called a Smartbook. This is a learning-adaptive version of the Silberberg 6e textbook. Since we are trying out this product, it will be provided for free for this class. The Smartbook is meant to enable you to read more efficiently, by highlighting important sections and testing you with questions that guide your learning. Answering these questions counts toward your completeness score in the reports section. You can use the Smartbook questions to offset your clicker points; they will count together toward your grade. Smartbook points can be earned by achieving completeness scores over the chapters for this course.

HOMEWORK & EXAMS:

Homework problems will be assigned from the Silberberg 6e textbook. These will not be graded, but will be closely related to problems on your exams. The answers can be found under resources on Sakai. The exams will be administered during normal class periods throughout the semester. There will be a total of 4 exams, of which one will be dropped. Regular homework will be the best preparation for these.

No makeup progress exams will be given for any reason. Since unavoidable emergent situations (illnesses, accidents, emergencies) do arise occasionally, we've incorporated a dropped-exam policy. (If you must be absent for an exam due to a documented and approved academic or UF athletic conflict, bring the documentation to your instructor beforehand (at least one week prior to the scheduled exam) and an early conflict exam will be scheduled. For more information on CHM2045 exam policy, see http://iteach.chem.ufl.edu/file.php/1/Exam Absence Policy GChem s13.pdf

CONTACTING THE INSTRUCTOR / OFFICE HOURS:

Emails are for administrative purposes only, and not for distance-instruction. Due to the large number of student emails, it is necessary that email queries about information already covered in the syllabus or announced in lecture or on the e-Learning site will be disregarded. If your email is unanswered, re-read the syllabus and/or the announcements posted in e-Learning. If this is not possible, visit the CLC.

GRADES: Grades for the term will be determined as follows:

| Progress Exams (best 3 of 4 @ 200 pts) | 600 pts |
|--|----------|
| Final Exam | 200 pts |
| Clickers & Smartbook | 100 pts |
| Activities | 100 pts |
| TOTAL | 1000 pts |

The following grade cutoffs will be used:

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900-1000 = A 860-899 = A- 830-859 = B+ 800-829 = B 760-799 = B-
730-759 = C+ 700-729 = C 660-699 = C- 630-659 = D+ 600-629 = D < 600 = E
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OTHER INFORMATION:

Honor Code: http://www.chem.ufl.edu/~itl/honor.html

Disabilities: http://www.chem.ufl.edu/~itl/disabilities.html

Counseling: http://www.chem.ufl.edu/~itl/counseling.html

DISCLAIMER: This syllabus is tentative and subject to change. Corrections to the syllabus will be announced to the class.