Introductory Chemistry --- CHM 103
Course Information and Syllabus
Spring Semester, 2020 Revised 3/18/2020

Instructor:

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Required Lecture Materials

1) Textbook: **Introductory Chemistry for Today** (Seager/Slabaugh, 9th edition)
2) **OWLv2** on line web learning system; purchase with text book.
Students of this course need key code: https://www.cengage.com/dashboard/#/course-confirmation/E-FHXL2FSCTGSR8/initial-course-confirmation
3) Turning Technologies QT or NXT clicker; purchase in Book Store.
(Rebate available for your clicker). Learn how to Register your clicker.
4) CHM 103 Skills Practice book purchase at URI book store.
5) Scientific calculator with log and exponent functions.
Calculators will not be provided; student will NOT be allowed to share during exams.
6) Students are expected to print their own copies of course documents.

Class Meetings

Until further notice, we will **not be meeting in our ususal classroom settings**:

Section 001: Monday, Wednesday and Friday, 9:00 – 9:50 AM in 100 Beaupre
Section 002: Monday, Wednesday and Friday, 12:00 – 12:50 PM in 100 Beaupre

Instead, I will be putting up YouTube videos as well as my lecture slides following the class schedule listed an the end. You will be able to find both the slides and the video links in the Power Point Presentation folder of our Sakai website. Eventually, I plan on setting up some sort of WebEx system in April. We will also suspend the use of clickers to take attendance and answer class related questions. An on line class requires a different mode of student practice. There is a tendency for most people to put off studying because there is no one to make you go to class. So here are some tips to help you: 1) treat the online class as a "real" course. You will have to hold yourself accountable for the material on the slides and completing the OWL work. 2) Practice time management: set aside your regular class time to go over slides and take notes. Listen to the YouTube videos and do the clicker problems as part of the experience. 3) Create a study space at home for you to do your work. Please do not think that you can do chemistry while sitting on the couch with "The Desparate Housewives of Orange

County" on TV. Watch the Skill check videos before each 'class" day and do the problems in Sakai. Then listen to the YouTube video, take notes, then do OWL problems later that day. Plan on putting in 90 minutes a day on chemistry. So on Monday, Wednesday and Friday do 50 minutes listening to YouTube video and then spend 40 minutes doing OWL. On Sunday, Tuesday and Thursday do 50 minutes of skill check videos , then 40 minutes of OWL https://www.northeastern.edu/graduate/blog/tips-for-taking-online-classes/

Course Learning Objectives

CHM 103 is a general education science course that serves students from many disciplines including: textiles sciences, nursing, nutrition and dietetics, exercise science, kinesiology, physical education, physical therapy and plant and animal sciences. The course is designed to advance students' factual scientific knowledge and to also increase their thinking competency and computational skills identified as essential to success in their discipline. These skills include: obtaining and evaluating the data and information required to address a problem, identifying relevant approaches and recognizing an appropriate strategy, correctly implementing a problem-solving process, critically evaluating the outcome of that process, and clearly communicating the final result. Topics include: matter and measurements; atomic structure; valence electrons and periodic law; inter-particle forces; states of matter; reactions and stoichiometry; solubility and solutions; reaction rates and equilibrium; acids, bases, and pH.

Learning outcomes for these topics are provided in the *CHM 103 Skills Practice Book.*

Hints for Success - PPP method (Prepare, Participate, Practice)

PREPARE: - Each class day: Read the text material in preparation for the next Youtube video as listed in the syllabus. **Review previous notes. Prepare any list of questions about unclear topics and email me. Do the Skill Check Lesson in Sakai for each lecture date.**

The **Skill Checks** tool in Sakai will probe your pre-lecture understanding of key concepts, and push you to think carefully about the new skills you're learning. Similar to OWL, these will consist of "pooled " questions – a set number of questions will be selected at random from a larger pool each time you open the Skill Check. After you've completed (and received credit for) a Skill Check, you can re-open it to answer a different set of questions, and "skill-drill " until you can answer each question correctly. Completing Skill Check problems earns points towards your **700** Homework problems.

PARTICIPATE: - During the YouTube video: Take notes, write down questions. Feel free to call me or send an email to me about any question about the subject even a "stupid" one. If you are unsure what to do or what was said, so are others. You can make comments or ask a question at the bottom of the YouTube video if not for yourself then for your fellow students. **NXT or QT clickers** will no longer be utilized or earn credit

PRACTICE: - After viewing the YouTube video: Reread your notes within 24 hours and **fill-in any blanks**. Check your notes against the vedeo. Look over the appropriate pages in the Skills Book and read them to fill-in any blanks. **Write a question in the margin** of your notes that will summarize each section. Answer these questions as you study the next day.

Complete and submit the assigned **OWLv2 exercises** daily. The OWLv2 system is designed to HELP STUDENTS LEARN. Points generate in OWL will go to students' accounts to help get to a total of 7**00** Homework problems. OWL assignments include recommended tutorials and problem sets. Try to learn as much as you can with the OWLv2 problems. Students will need to stay on track and on time with the OWLv2 homework. Each assignment will have a due date that corresponds with the timing of each lecture topic. Ample time is provided to complete each assignment. Since the OWLv2 system is intended to be a key learning task in this course, the assignments may be worked in student study groups or with help from a tutor or a friend as open book exercises. **Do the assigned OWLv2 homework** by Sunday at 11:55 pm.

Students are required to get 700 Homework points which I combine from the three sources, Skill Checks, clickers and OWLv2 problems. I keep a record and pool all the points that a student earns from three sources to help students get to 700, which is the required total. So that means if a student were to miss some pre-lecture Skill Check work, they could make it up earning more points in the OWLv2 work. The combined sources have more that 1000 points possible and students can pick and choose to get to 700 by the end of the semester. So if a student missed some skill check points, the can easily made-up the difference by doing more OWLv2 assignments. Bottom line, you will not lose points per se if you miss a problem set, but you will have to rely on making them up later by doing more OWv2 work.

On-Line Technology

SAKAI: Sakai is the University of Rhode Island, campus-wide class-room management tool. Nearly all classes at URI have a web site on Sakai as does CHM 103. Students should see a course tab for CHM 103 Introductory Chemistry Lecture when the main portal of Sakai https://sakai.uri.edu/portal is opened with your campus user-name

and password. The CHM 103 website on Sakai will be the main communication tool for class-wide announcements generated by me. Grades will be kept on Sakai. Students will be able to download old quizzes, and relevant videos from the Lessons section of Sakai.

Clicker usage: For the first part of class we used Turning Technology clicker products in CHM 103 class daily. Now we will no longer be able to do so. Students who still have 0 points clicker points in the Sakai grade book, but you did use clickers, then call me and we will work this out.

OWLv2 usage: On-line **W**eb **L**earning, OWLv2, is a product of Cengage Company, who makes our text book. Homework assignments for CHM 103 will be completed in OWLv2. Students will need to register in OWL using the registration card, that came inside the textbook. It is possible to purchase a card alone from the bookstore or on-line if you already have a text book. OWLv2 as a communication tool for homework related questions from students to me using my email address listed above. Students can get to the main portal of OWLv2 at: http://www.cengagenow.com At this website students choose my class CHM 103, Spring 2020.

Cheating

All forms of academic dishonesty are a violation of the University Honor Code and are strictly forbidden. You must NOT cheat during exams and Not even give the appearance of cheating. From here on out, Exams will be on line in a timed but open book format. But you may ask me to check an exam if you think I have made an error it totaling the sums of the grade. A student who commits academic dishonesty will receive a failing letter grade for the exam and a possible failing grade for the course. Further sanctions may be imposed by the College Dean.

Grading Policy

Each student's lecture course grade will be assigned by me based on:

4 Cumulative Mid-Term Exams (15 % each)	= 60 %	(360 pts)
OWL Homework, Skill Checks and Clicker Usage	= 15 %	(90 pts)
1 Cumulative Final Exam (25 %)	= 25 %	(150 pts)
Total	**= 100 %.**	**(600 pts)**

Grading will be as follows: at least 90% guarantees an A-, 93% for an A
at least 80% guarantees a B-, 83% for a B, 87% for a B+
at least 70% guarantees a C-, 73% for a C, 77% for a C+
at least 60% guarantees a D, (there is no D-), 67% for a D+
less than 60% guarantees an F.

CHM 105 Lab is a separate course; grades will be determined by the lab instructor.

Students with valid permission: including a written document concerning a medical or URI team or club related sports event or military leave, can apply to me to make up a missed Mid-term exam. In valid permission cases, I may arrange for an alternate testing date or I may replace the missing grade with the Final Exam grade. No student may just drop an exam and expect me to replace the grade by averaging other scores without a valid permission. If as student misses two or more Mid-term exams, you will need to repeat the course. All students must take the Final Exam.

Please call me about Alternate testing. We can work out something to fit students with a documented disability. These students should contact me as early as possible in the semester to make arrangements for reasonable accommodations, as indicated by the Disability Services for Students Office. Students can anticipate that their graded exam papers will be returned in class *at least one full week after* the exam date. In the interim, students should not inquire as to the status of their test papers. Exam scores will also be communicated to students at the earliest opportunity through the Sakai Gradebook.

There are **NO extra credit** assignments given, but there are more than 1000 total problems from which to select in order to get **700** in case you miss some. Students need to successfully complete 7**00** Homework points, which are a combination of OWLv2, Clicker and pre-class Skill check points. This will be divided by 7 to get the 100 Homework points mentioned above, which is equilvalent to a Exam. If a student successfully completes more than 7**00** Homework points that is good, but it will still be limited to 100 maximum Homework points.

Important Spring Semester Deadlines:

- First day of classes: January 22nd.
- Last day of eCampus open add period: Tuesday, January 28th.
- Last day of eCampus add with permission number: Tuesday, February 4th.
- Last day to drop courses with no "W" on transcript: Thursday, February, 13th.
- President's Day – Classes Meet: Monday, February 17th.
- Last day to drop but with a "W" on transcript: Wednesday, March 4th.
- Spring Break: Martch 9th – 15th.
- Freshman mid-term grades due posted on eCampus: Monday, March 16th.
- Last day of classes: Tuesday, April 28th.
- Grades due in eCampus by 12:00 noon: Tuesday, May 14th.

web.uri.edu/enrollment/academic-calendars/

Introductory Chemistry --- CHM 103

Course Schedule Spring Semester, 2020

Week #	MONDAY	WEDNESDAY	FRIDAY
1	**1/20:** **Advising day. No Classes** HW: Finish Boot Camp stuff.	**1/22: General Info. Lesson 1** Ch 1: Matter Meas, Calculate. HW: 1.2, 1.4 and EOC 1.1	**1/24: Lesson 2** Ch 1: Matter Meas, Calculate. HW: 1.6, 1.7 and EOC 1.2
2	**1/27: Lesson 3** Ch 1: Matter Meas, Calculate HW: 1.8, 1.9, 1.11 and EOC 1.3	**1/29: Lesson 4** Ch 1: Matter Meas, Calculate. HW: Mastery Chapter 1	**1/31: Lesson 5** Ch 2: Atoms and Molecules. HW: 2.1, 2.2, 2.3 and EOC 2.1
3	**2/03: Lesson 6** Ch 2: Atoms and Molecules. HW: 2.4, 2.5, 2.6, and EOC 2.2	**2/05: Lesson 7** Ch 2: Atoms and Molecules. HW: 2.7 and Mastery Chapter 2	**2/07: Lesson 8** Ch 3: Elect. Struct, Periodic Law. HW: 3.1, 3.2, 3.3 and EOC 3.1
4	**2/10: Lesson 9** Ch 3: Elect. Struct, Periodic Law. HW: 3.4, 3.5, 3.6 and EOC 3.2	**2/12: Lesson 10** Ch 3: Elect. Struct, Periodic Law. HW: Mastery Chapter 3	**2/14: Lesson 11** **EXAM 1** Chapters 1-2-3 HW:
5	**2/17: Lesson 12** Ch 4: Forces Between Particles. HW: 4.1, 4.2, 4.3 and EOC 4.1	**2/19: Lesson 13** Ch 4: Forces Between Particles. HW: 4.4, 4.5, 4.6, 4.8, EOC 4.2	**2/21: Lesson 14** Ch 4: Forces Between Particles. HW: 4.9, 4.10, 4.11 and EOC 4.3
6	**2/24: Lesson 15** Ch 4: Forces Between Particles. HW: Mastery Chapter 4	**2/26: Lesson 16** Ch 5: Chemical Reactions. HW: 5.1, 5.3, 5.4 and EOC 5.1	**2/28: Lesson 17** Ch 5: Chemical Reactions. HW: 5.5, 5.6 , 5.7, 5.8, EOC 5.2
7	**3/02: Lesson 18** Ch 5: Chemical Reactions. HW: 5.9, 5.10, 5.11 and EOC 5.3	**3/04: Lesson 19(Last Day Drop)** Ch 5: Chemical Reactions. HW: Mastery Chapter 5	**3/06 Lesson 20** **EXAM 2** Chapters 4-5. HW:
8	**3/09: Lesson 21** **No Classes -Spring Break.** HW: Finish what you got.	**3/11: Lesson 21** **No Classes –Spring Break.** HW: Finish what you got.	**3/13: Lesson 21** **No Classes –Spring Break.** HW: Finish what you got.
9	**3/16: Lesson 22 Freshmn Grdes** Ch 6: States of Matter, Solids. HW: 6.1, 6.2, 6.6 and EOC 6.1	**3/18: Lesson 23** Ch 6: States of Matter, Liquids. HW: 6.7, 6.8, 6.9 and EOC 6.2	**3/20: Lesson 24** Ch 6: States of Matter, Gases. HW: 6.12, 6.13, 6.15, EOC 6.3
10	**3/23: Lesson 25** Ch 6: States of Matter, Gases. HW: Mastery Chapter 6	**3/25: Lesson 26** Ch 7: Solutions and Colloids. HW: 7.1, 7.2, 7.3 and EOC 7.1	**3/27: Lesson 27** Ch 7: Solutions and Colloids. HW: 7.4, 7.5 and EOC 7.2
11	**3/30: Lesson 28** Ch 7: Solutions and Colloids. HW: 7.6, 7.7, 7.8 and EOC 7.3	**4/01: Lesson 29** Ch 7: Solutions and Colloids. HW: Mastery Chapter 7	**4/03: Lesson 30** **EXAM 3** Chapters 6-7. HW:
12	**4/06: Lesson 31** Ch 8: React Rates, Equilibrium. HW: 8.1, 8.2, 8.3, 8.4, EOC 8.1	**4/08: Lesson 32** Ch 8: React Rates, Equilibrium. HW: 8.5, 8.6, 8.7, 8.8, EOC 8.2	**4/10: Lesson 33** Ch 8: React Rates, Equilibrium. HW: Mastery Chapter 8
13	**4/13: Lesson 34** Ch 9: Acids, Bases and Salts. HW: 9.2, 9.3 and EOC 9.1	**4/15: Lesson 35** Ch 9: Acids, Bases and Salts. HW: 9.4, 9.5 and EOC 9.2	**4/17: Lesson 36** Ch 9: Acids, Bases and Salts. HW: 9.9, 9.11 and EOC 9.3
14	**4/20: Lesson 37** Ch 9: Acids, Bases and Salts. HW: 9.12, 9.13 and EOC 4	**4/22: Lesson 38** Ch 9: Acids, Bases and Salts. HW: Mastery Chapter 9	**4/24: Lesson 39** **EXAM 4** Chapters 8-9. HW:
15	**4/27: Lesson 40** **Review exam 4.** HW: Finish whatever is left.	**4/29: Lesson 41** **Reading day.** HW: Finish whatever is left.	**Final Exam: 100 Beaupre** **Section 001:** May 6, 11:30-2:30 **Section 002:** May 4, 11:30-2:30