

Introductory Chemistry --- CHM 103

Course Information and Syllabus

Spring Semester, 2019

Instructor:

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Office Hours: 12 noon – 2 pm Monday – Friday or by [Star Fish](#) appointment.

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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-FHXLHRLGMWX9P/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

Section 001: Monday, Wednesday and Friday, 9:00 – 9:50 AM in 100 Beupre

Section 002: Monday, Wednesday and Friday, 2:00 – 2:50 PM in 100 Beupre

Do not miss lecture. We use clickers during lecture to take attendance and answer class related questions; the points go towards Homework. It is in your best interest to take some notes during lecture. Taking notes will aid you in learning the material and doing well on the exams. Please take notes by hand during class and not by computer as I will post a copy of the slides later on Sakai and using the computer will distract you. Your behavior in the lecture hall says a lot about your dedication as a student. Please turn off all cell phones and audible beepers before entering the lecture hall. Please arrive on time and do not walk out early. Please refrain from random computer use and idle chatter in the classroom; it is discourteous and distracting to your classmates.

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: - **Before class: Read the text material** in preparation for the next class as listed in the syllabus. **Review previous class notes. Prepare a list of questions about unclear topics and bring to class. Do the Lesson for each up-coming class.**

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 class: Take notes, ask questions and respond to my questions.** Feel free to ask any question about the subject even a "stupid" one. If you are unsure what to do or what was said, so are others. Ask the question if not for yourself then for your fellow students. **NXT or QT clickers** will be utilized in class as one of the forms of in-class response. Be sure to register your clicker, in the Turning Technologies section of the CHM 103 SAKAI homepage. I will award 2 points for each correct clicker answer given in class or 1 participation point and apply it to your 700 Homework problems in an account for your work there.

PRACTICE: - After class: Reread your notes within 24 hours of the lecture and **fill-in any blanks**. Make a friend and check their notes to see if you missed anything. Look over the appropriate pages in the Skills Book and read them to fill-in any blanks. **Write a question in the margin** 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 **700** 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-class Skill Check work or some in-class clicker work they could make it up earning more points in the post-class OWLv2 work. The three combined sources have more than 1000 points possible and students can pick and choose to get to 700 by the end of the semester. So if a student missed a class, they would miss the opportunity to gain points offered in class, but those points can be easily made-up by doing more OWLv2 homework or the Sakai pre-class Skills Check work. 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 OWLv2 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: We use Turning Technology clicker products in CHM 103 class daily. Students will have to register their NXT or QT clickers on Sakai by opening the Turning Point tab on the left-hand edge of the Sakai website. Students should register their clicker using the 6 character clicker ID number, please note that 0 is a zero and not an O, otherwise a bad format error will ensue. Students can also download the Turning Point app for their cell phone. <https://www.turningtechnologies.com/turningpoint-app/> Students will have to pay to register the phone apt. You should bring it to all our classes.

OWLv2 usage: On-line Web Learning, 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 2019.

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. During an exam, I may ask a student to move to another seat. You should just move; someone else may be looking at your test answers. You must not change test answers for regrading. 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)	= 57 %	(400 pts)
OWL Homework, Skill Checks and Clicker Usage	= 14 %	(100 pts)
1 Cumulative Final Exam (25 %)	= 29 %	(200 pts)
Total	= 100 %.	(700 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 a student misses two or more Mid-term exams, you will need to repeat the course. All students must take the Final Exam.

Alternate testing is available for 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 **700** 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 equivalent to a Exam. If a student successfully completes more than **700** 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 23rd.
- Last day of eCampus open add period: Tuesday, January 29th.
- Last day of eCampus add with permission number: Tuesday, February 5th.
- Last day to drop courses with no "W" on transcrip: Thursday, February, 14th.
- President's Day – Classes Meet: Monday, February 18th.
- Last day to drop but with a "W" on transcript: Wednesday, March 6th.
- Spring Break: Martch 11th – 17th.
- Freshman mid-term grades due posted on eCampus: Monday, March 18th.
- Last day of classes: Tuesday, April 30th.
- Grades due in eCampus by 12:00 noon: Tuesday, May 16th.

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Course Schedule Spring Semester, 2019

Week #	MONDAY	WEDNESDAY	FRIDAY
1	1/21: Advising day. No Classes HW: Finish whatever is left.	1/23: General Info. Lesson 1 Ch 1: Matter Meas, Calculate. HW: 1.2, 1.4 and EOC 1.1	1/25: Lesson 2 Ch 1: Matter Meas, Calculate. HW: 1.6, 1.7 and EOC 1.2
2	1/28: Lesson 3 Ch 1: Matter Meas, Calculate HW: 1.8, 1.9, 1.11 and EOC 1.3	1/30: Lesson 4 Ch 1: Matter Meas, Calculate. HW: Mastery Chapter 1	2/01: Lesson 5 Ch 2: Atoms and Molecules. HW: 2.1, 2.2, 2.3 and EOC 2.1
3	2/04: Lesson 6 Ch 2: Atoms and Molecules. HW: 2.4, 2.5, 2.6, and EOC 2.2	2/06: Lesson 7 Ch 2: Atoms and Molecules. HW: 2.7 and Mastery Chapter 2	2/08: Lesson 8 Ch 3: Elect. Struct, Periodic Law. HW: 3.1, 3.2, 3.3 and EOC 3.1
4	2/11: Lesson 9 Ch 3: Elect. Struct, Periodic Law. HW: 3.4, 3.5, 3.6 and EOC 3.2	2/13: Lesson 10 Ch 3: Elect. Struct, Periodic Law. HW: Mastery Chapter 3	2/15: Lesson 11 EXAM 1 Chapters 1-2-3 HW:
5	2/18: Lesson 12 Ch 4: Forces Between Particles. HW: 4.1, 4.2, 4.3 and EOC 4.1	2/20: Lesson 13 Ch 4: Forces Between Particles. HW: 4.4, 4.5, 4.6, 4.8, EOC 4.2	2/22: Lesson 14 Ch 4: Forces Between Particles. HW: 4.9, 4.10, 4.11 and EOC 4.3
6	2/25: Lesson 15 Ch 4: Forces Between Particles. HW: Mastery Chapter 4	2/27: Lesson 16 Ch 5: Chemical Reactions. HW: 5.1, 5.3, 5.4 and EOC 5.1	3/01: Lesson 17 Ch 5: Chemical Reactions. HW: 5.5, 5.6, 5.7, 5.8, EOC 5.2
7	3/04: Lesson 18 Ch 5: Chemical Reactions. HW: 5.9, 5.10, 5.11 and EOC 5.3	3/06: Lesson 19(Last Day Drop) Ch 5: Chemical Reactions. HW: Mastery Chapter 5	3/08: Lesson 20 EXAM 2 Chapters 4-5. HW:
8	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.	3/15: Lesson 21 No Classes -Spring Break. HW: Finish what you got.
9	3/18: Lesson 22 Freshmn Grdes Ch 6: States of Matter, Solids. HW: 6.1, 6.2, 6.6 and EOC 6.1	3/20: Lesson 23 Ch 6: States of Matter, Liquids. HW: 6.7, 6.8, 6.9 and EOC 6.2	3/22: Lesson 24 Ch 6: States of Matter, Gases. HW: 6.12, 6.13, 6.15, EOC 6.3
10	3/25: Lesson 25 Ch 6: States of Matter, Gases. HW: Mastery Chapter 6	3/27: Lesson 26 Ch 7: Solutions and Colloids. HW: 7.1, 7.2, 7.3 and EOC 7.1	3/29: Lesson 27 Ch 7: Solutions and Colloids. HW: 7.4, 7.5 and EOC 7.2
11	4/01: Lesson 28 Ch 7: Solutions and Colloids. HW: 7.6, 7.7, 7.8 and EOC 7.3	4/03: Lesson 29 Ch 7: Solutions and Colloids. HW: Mastery Chapter 7	4/05: Lesson 30 EXAM 3 Chapters 6-7. HW:
12	4/08: Lesson 31 Ch 8: React Rates, Equilibrium. HW: 8.1, 8.2, 8.3, 8.4, EOC 8.1	4/10: Lesson 32 Ch 8: React Rates, Equilibrium. HW: 8.5, 8.6, 8.7, 8.8, EOC 8.2	4/12: Lesson 33 Ch 8: React Rates, Equilibrium. HW: Mastery Chapter 8
13	4/15: Lesson 34 Ch 9: Acids, Bases and Salts. HW: 9.2, 9.3 and EOC 9.1	4/17: Lesson 35 Ch 9: Acids, Bases and Salts. HW: 9.4, 9.5 and EOC 9.2	4/19: Lesson 36 Ch 9: Acids, Bases and Salts. HW: 9.9, 9.11 and EOC 9.3
14	4/22: Lesson 37 Ch 9: Acids, Bases and Salts. HW: 9.12, 9.13 and EOC 4	4/24: Lesson 38 Ch 9: Acids, Bases and Salts. HW: Mastery Chapter 9	4/26: Lesson 39 EXAM 4 Chapters 8-9. HW:
15	4/29: Lesson 40 Review exam 4. HW: Finish whatever is left.	5/01: Lesson 41 Reading day. HW: Finish whatever is left.	Final Exam: 100 Beupre Section 001: May 8, 8:00-11:00 Section 002: May 8, 11:30-2:30