CHM 112 – GENERAL CHEMISTRY II
SYLLABUS – SPRING 2020

Instructor: Dr. Maria Donnelly
Office: Beaupre 117C
Email: madon@uri.edu

See p. 5 & 6 for modifications due to the COVID-19 closure

Office hours: Appointments are not required but students with appointments receive priority for that time slot. I anticipate holding official office hours on Tuesdays, Wednesdays, and Thursdays each week, with specific times listed on URI's Starfish Success Net.

- Appointments can be made using Starfish
- Students should not sign up for more than 2 consecutive time slots, but are welcome to stay longer if no one else needs assistance
- For appointments outside office hours, email me for availability or just stop by my office to see if I am available. Most weeks I am on campus Monday through Friday.

Course Description

CHM 112 continues laying the foundation for future chemistry, biochemistry, pharmaceutical, and engineering courses that was started in CHM101. The terminology, fundamental principles, and theories presented in CHM112 will be heavily used in these future courses. An understanding of the material presented and the ability to apply the concepts being studied to real-world problems is essential for many different fields of study.

Resources & Required Course Materials

- **Textbook:** McGraw Hill General Chemistry: The Essential Concepts, Chang/Goldsby, 7th Ed.
- **Sakai:** Sakai will be used to post grades and for all official course communications; therefore, it is ESSENTIAL that you regularly check the Sakai site and your URI email to ensure that you do not miss important information. Sakai will also contain links to course materials and various other study resources.
- **Lecture Presentations**: **Partial** lecture presentations will be available through Sakai prior to each class meeting (or earlier). It is highly recommended that you bring a copy of these notes with you to class – they will provide an outline for you to use when taking notes that will help you to better focus on, and record, the information being discussed in class. Note that these are PARTIAL lecture notes. They are intended to assist you in your note-taking while in lecture – they are NOT a substitute for regular class attendance and will NOT supply all of the information that you will need to successfully pass CHM 112. For example, the partial presentations will include the example problems that we will cover in lecture, but they will not include all of the solutions to those problems.
- **Online Homework:** McGraw Hill's Connect; both the on-line homework and the Learnsmart assignments are required as part of your grade. Information on how to access Connect can be found on the course Sakai site.
- **Calculator:** CHM 112 is a math intensive course, and a scientific calculator will be an essential tool for lecture, exams, and out of class assignments. **Graphing calculators with advanced functionalities, such as the ability to access the internet, capture images, communicate wirelessly, and display pdf and other non-text files, will not be allowed on exams.** Older graphing calculators, such as the TI-83, are acceptable. Newer models that are not able to access the internet, capture images, communicate wirelessly, etc., can also be used, but will require a sticker indicating that they are acceptable to use during exams, especially if they are visually similar to more advanced models. Information on how to obtain a sticker will be provided prior to the first exam. A limited number of basic scientific calculators will be available for use during exams. If you will need to borrow one of these calculators for your exams, and you let me know in advance, I will make sure that one is available for you. You will need to supply an ID to borrow a calculator; the ID will be returned to you when you turn in the calculator.

Additional Study Help Resources

- **Beaupre Learning Center:** Teaching assistants keep regular office hours in the Learning Center (Beaupre 1st floor, room 115). This is a great place for students to study and work problems together, especially since it is conveniently located near the offices of most of the lecturers, including my own. The CHM 112 Sakai site will contain a link to the schedule of TA office hours once that schedule becomes available.
- **Academic Enhancement Center (AEC):** The Academic Enhancement Center, located in Roosevelt Hall, is staffed with tutors and academic coaches that are trained to help you with difficult concepts in a variety of courses. Visit the URI AEC website at uri.edu/aec for more information.

Class Meetings

- **Section 3:** Tuesday & Thursday, 9:30 – 10:45 am in Beaupre 100

Disability Accommodations

Any student with a documented disability is welcome to contact me as early in the semester as possible so that we may arrange reasonable accommodations. As part of this process, please make sure to contact the Disability Services for Students Office at 302 Memorial Union; their phone number is 401-874-2098.

Grading & Testing Policies

Course grades will be determined by each student's performance on all assignments and exams. The final grade will be calculated as follows:

Online Homework, Learnsmart, & Quizzes	15 %
4 Lecture Exams* (17 % each)	68 %
Final Exam	17 %
Total	**100%**

***YOUR FINAL EXAM SCORE WILL TAKE THE PLACE OF ANY EXAM MISSED DURING THE TERM** (i.e. it will count twice). For students who do not miss an exam, the final exam may take the place of their lowest lecture exam if the final exam grade is higher. **The purpose of this policy is to eliminate the need for make-up exams**.

Formula for calculating course average:

Course Average = (Exam Average * 0.85) + (Homework average * 0.15)

At the end of the semester, the exam average will include five exams (four lecture exams plus the final exam). The homework average includes homework, learnsmart, and quizzes.

Lecture Exams will be given during class time in Beaupre 100. Students will be assigned a seat and given an exam with their name on it. **Students must sit in the assigned seat and take the exam given to them. MAKE SURE TO HAVE YOUR STUDENT ID WITH YOU ON EXAM DAYS.** Proctors will check your student ID when you hand in your exam to make sure that the correct student is taking each exam. All work must be shown to receive full credit on exam problems.

If you believe that there is an error in your exam grade, **you must bring your concern to my attention within 48 hours of the exam being handed back in class.** No grade changes will be considered after this time. Any request for re-grading must be submitted in writing along with the **complete original exam**, and the **entire exam** will be looked at during re-grading.

Students receiving disability accommodations, participating in **University sanctioned** events, or observing religious holidays may receive alternate testing accommodations. These arrangements require approved documentation. Written notification of a request for alternate testing accommodations must be made **at least one full week prior to the scheduled exam**. Students with alternate testing accommodations will take their exams in the Academic Testing Center in Chaffee Hall. **If you are participating in a University activity that requires frequent**

travel (i.e. sports team, band, etc.), please check the exam schedule now and contact me as soon as possible if your travel will cause you to miss any exams so that you can be set up to take the impacted exams in the Testing Center.

Unannounced quizzes may be given periodically to help students evaluate their understanding of course material and to encourage students to attend class. Grades will be based on attendance, and one quiz grade will be dropped to eliminate the need for make-ups.

Grades in CHM 112 are based on a student's level of mastery of the material presented and must be earned by demonstrating proficiency in the required skills. Grades are not negotiable and are NOT determined by what is required by a student's desired degree program. The following grading scale will be used:

≥90% = A/A-; 80-89% = B-/B/B+; 66-79 = C-/C/C+; 55-65% = D; <55% = F

Incomplete Policy:
Incomplete grades cannot be assigned except in the case of a real emergency. Any grade of incomplete must be approved by the department chair and the dean. In order to receive an incomplete, a student's **course work must have been passing** and the student **must have completed at least half of the coursework for the semester**. Incompletes should be made up within one year of the semester in which the grade of incomplete was assigned. **If an incomplete is not made up prior to the two year deadline established by the University, the "I" will be replaced with a grade calculated for the student based on the work completed and including zeroes for any work not completed.**

Assignments
McGraw Hill's Connect on-line homework and Learnsmart programs will be used for graded assignments. **Students see the greatest value from these tools when they register for Connect as soon as possible and complete all assignments in a timely manner.** A link to the course Connect site can be found on Sakai.

To receive full credit, on-line homework assignments must be completed by 11:59 pm on the date indicated on the list of assignments in Connect. **Homework assignments can be attempted multiple times, with the attempt that has earned the largest number of points being used in the calculation of the final homework average.** Homework assignments can also be submitted in multiple attempts (e.g. some problems completed in one attempt and other problems completed in a different attempt) as long as you send me an email to let me know that you would like me to look at multiple attempts when calculating your homework average. Late homework will be accepted at a loss of 2% credit per day. Late points are automatically deducted by the Connect program, so requests for extensions are not required. **Homework assignments will take time – do not wait to start your homework assignments until the night before they are due!**

Connect does not have a function to allow the automatic late submission of Learnsmart assignments, so **if you would like to complete a Learnsmart activity past the due date, you must send me a request via email. There is no limit to the number of requests for extensions on Learnsmart assignments**. If you do not request an extension, your grade for the Learnsmart assignment will be calculated by the Connect program based on the percentage completed prior to the date and time the assignment is due. All Learnsmart extensions will end on the last day of classes; however, it is not recommended that you wait until the end of the semester to complete your Learnsmart assignments because you are likely to run out of time and end up receiving zero credit for the assignments you did not have time to complete.

Homework, Learnsmart assignments, and Quizzes will be averaged together to determine the final Homework Average. For this calculation, homework assignments will be counted as the number of points earned on that assignment and Learnsmart assignments will be counted as the

number of points equal to the percentage of the assignment that was completed. Quizzes will be 20 points each. The number of points earned will be divided by the total number of points for all assignments. Since homework assignments are often worth more than 100 points, the homework assignments are worth more overall than the Learnsmart assignments.

Since general chemistry is, in many ways, like learning a new language, lists of key terms will be posted on Sakai. While the importance of these terms and the connections between them will be discussed in lecture, it is the students' responsibility to use their textbook to find the definitions.

Sakai will also be used to post various learning tools and any additional assignments.

Academic Integrity

Academic dishonesty is a serious offence, and URI's policy on academic honesty will be strictly enforced. This policy states, in part, that "Students are expected to be honest in all academic work. A student's name on any written work including assignments, lab reports, internship reports, papers, or examinations, shall be regarded as assurance that the work is the result of the student's own thought and study. Work should be stated in the student's own words and produced without assistance or properly attributed to its source." The entire policy can be found in the student handbook, which is available online (uri.edu/studentconduct/files/2015-2017-Student-Handbook.pdf). Some examples of academic dishonesty contained in that policy include:

- Unauthorized possession or access to exams
- Unauthorized communication during exams
- Unauthorized use of another's work or preparing work for another student
- Taking an exam for another student
- Altering or attempting to alter grades
- The use of notes or electronic devices such as calculators, computers, or cell phones to gain an unauthorized advantage during exams
- Facilitating or aiding another's academic dishonesty

VIOLATION OF THIS POLICY MAY RESULT IN THE STUDENT RECEIVING A FAILING GRADE FOR THE ASSIGNMENT OR FOR THE ENTIRE COURSE.

Final Note on how to achieve success in CHM112

CHM112 is a math intensive course that requires a true understanding of the material being taught – **memorization alone is not enough**. CHM112 can be a challenging course, but **with sufficient effort success is possible**! Success in this course requires significant effort from the student. You will be expected to understand many complex processes and to master numerous mathematical skills. It is EXTREMELY important for you to stay on top of your work. Many of the scientific topics that are covered later in the semester build upon those that are learned earlier in the semester – early mastery of those concepts will make it much easier for you to understand later material. Successful CHM112 students are those who put in the necessary effort starting at the very beginning of the semester. You will want to prepare for and participate in all lectures, and practice what you have learned. Make sure to complete all assignments in a timely manner. Actively work to learn the material throughout the semester. If you find that you are struggling **SEEK HELP RIGHT AWAY**. Use the Starfish Success Net (there is a link on the Sakai site) to make an appointment to see me – or simply stop by my office – I am happy to go over material that you are struggling with, answer questions about homework problems, etc. You can also visit the TAs in the Beaupre Learning Center or the tutors in the AEC. The important thing is that you get help **EARLY!**

SCHEDULE*

***Note that changes may be made to this schedule due to weather, pace of the class, or other considerations. If school is closed on an exam day (e.g. snow day), THE EXAM WILL BE HELD ON THE NEXT DAY THAT THE CLASS MEETS.**

Chapter	Title	Week/Date
Intro	Brief Review of CHM101	1-3
14	Chemical Kinetics	
Exam 1	**CHM101 review & Chapter 14**	**Tuesday Feb. 11th**
15	Chemical Equilibrium	3-6
16	Acids and Bases	
Exam 2	**Chapters: 15 & first part of 16**	**Tuesday March 3rd**
16	Acids and Bases	7-11 (Spring Break is wk 8)
17	Acid-Base Equilibria and Solubility Equilibria	
Exam 3	**Chapters: second part of 16 & 17**	**Tuesday April 7th**
18	Thermodynamics	11-14
19	Redox Reactions and Electrochemistry	
Exam 4	**Chapters 18 & 19**	**Tuesday April 28th**
****Final Exam: Tuesday May 5th 8:00 – 11:00 am in Beaupre 100**		

** Final exam dates are set by the University and are subject to change

Important Spring 2019 Semester Deadlines:

- Wednesday 1/22: Classes start
- Tuesday 1/28: Open add period ends
- Tuesday 2/4: Permission Number add period ends
- **Wednesday 2/12: Last day to drop without a W on your transcript**
- Monday 2/17: Presidents Day – classes DO meet
- **Wednesday 3/4: Last day to drop a course in ecampus** (after this date you would need paperwork signed by your Dean)
- Monday 3/9 – Friday 3/13: Spring Break
- Monday 3/16: Freshman midterm grades
- Tuesday 4/28: Last day of classes

The following modifications will be made as a result of the closure from March 16th to March 20th and the move to on-line instruction from March 23rd to April 3rd. If additional changes are made to the University schedule, there may also be additional changes to the course schedule and policies.

Grading:

Provided that face to face classes are able to resume on April 6th, the grading policies and percentages for the course will not change.

Online Homework, Learnsmart, & Quizzes	15 %
4 Lecture Exams* (17 % each)	68 %
Final Exam	17 %
Total	**100%**

The on-line Learnsmart and Homework assignments should be submitted as usual. The due dates for the Chapter 16_2 Homework assignment and the Chapter 17 Learnsmart assignment have been moved to next week, and additional adjustments may be made going forward if necessary. All due dates for homework and Learnsmart assignments can be found on Connect.

I will be presenting my lectures, and they will be recorded and put on-line so that you will be able to view them as if you were attending class. You may watch the videos on your own schedule, but should make sure to view at least two per week to keep up with the pace of the class and the information required to complete the homework assignments. Questions on lecture content and homework problems can be emailed to me; I will be checking my email regularly. You should receive a response within 24 hours Monday – Friday, and I generally check my email at least once or twice a day on weekends also. When asking questions about homework problems, I recommend that you include a picture of the work that you have done to help me to better understand your question. Since most students will not be on campus, I will not be holding regular office hours. However, in person meetings can be scheduled via email for as long as they are permitted by the University and can be conducted safely.

SCHEDULE*
***Note that changes will likely be made to this schedule if remote instruction continues past April 3rd.**

Chapter	**Title**	**Week/Date**
Intro	Brief Review of CHM101	1-3
14	Chemical Kinetics	
Exam 1	**CHM101 review & Chapter 14**	**Tuesday Feb. 11th**
15	Chemical Equilibrium	3-6
16	Acids and Bases	
Exam 2	**Chapters: 15 & first part of 16**	**Tuesday March 3rd**
16	Acids and Bases	7-11 (Spring Break is wk 8)
17	Acid-Base Equilibria and Solubility Equilibria	
Exam 3	**Chapters: second part of 16 & 17**	**Thursday April 9th**
18	Thermodynamics	11-14
19	Redox Reactions and Electrochemistry	
Exam 4	**Chapters 18 & 19**	**Tuesday April 28th**
****Final Exam: Tuesday May 5th 8:00 – 11:00 am in Beaupre 100**		

** Final exam dates are set by the University and are subject to change

If face-to-face classes are able to resume on April 6th, Exam 3 will be held on Thursday April 9th rather than on the original date of Tuesday April 7th. The exam will cover all material covered in lecture, either on-line or in person, by Tuesday April 7th. Any material in Chapter 17 that is not covered by April 7th will not be on Exam 3. As usual, an exam information sheet and preliminary cover sheet will be posted via Sakai announcement prior to the exam. If remote instruction continues past April 3rd, Exam 3 will be cancelled and additional information about future assessments will be posted via Sakai.

If you have any questions or concerns, please do not hesitate to ask.