CHEM 103 Sections 1 & 2—General Chemistry I, FALL 2015

Instructors: (Sec. 1) Tyler Meldrum, ISC 1060, 221-2561 tkmeldrum@wm.edu

Office hours: Mondays Jordan Walk, 2:00–3:30 pm

Tuesdays Jordan Walk, 11:00–12:30 pm Wednesdays Tyler Meldrum, 9:00–10:30 am Thursdays Tyler Meldrum, 3:30–5:00 pm Or by arrangement with one of the instructors

Lectures: (Sec. 1) Mondays, Wednesdays, Fridays 11:00 am-12:00 noon, ISC 1127

(Sec. 2) Mondays, Wednesdays, Fridays 12:00 noon-1:00 pm, ISC 1127

Course Description:

This course is intended for science majors/concentrators and pre-medical students. In it, we will discuss the nature of atoms and molecules, stoichiometry, states of matter, solutions, reactions, kinetics, equilibrium, and acid/base chemistry. Students initially enrolled in CHEM 103 solely to meet GER2 requirements are strongly encouraged to take CHEM 101 instead. CHEM 103 does NOT fulfill COLL 200-level requirements.

Texts:

(Required) McMurray, J.E.; Fay, R.C. General Chemistry: Atoms First, 2nd Edition; Pearson: Upper

Saddle River, NJ, 2014. ISBN: 978-0-321-80926-1. Package includes Mastering Chemistry

access code.

(Optional) Topich, J.; Topich, R. Selected Solutions Manual, General Chemistry: Atoms First, 2nd

Edition; Pearson: Upper Saddle River, NJ, 2014. ISBN: 978-0-321-81332-9.

Note: Two copies of the solutions manual are available in Swem Course Reserves.

Course Structure and Grading:

This course is separate and independent of the laboratory course, CHEM 103L. Consequently, this is a lecture only course and the grades are determined by three (3) midterm exams, one (1) final exam, and homework sets. The best guarantors of success in CHEM 103 are reading the assigned material *before* the corresponding lecture, attending every lecture, thoughtfully completing the assigned homework for submission, and working practice problems as necessary.

Both sections of this course are taught with the same syllabus, problem sets, and grading structure. Consequently, you should feel free to attend office hours and ask questions of either instructor. However, due to space limitations in ISC 1127, you must attend the lecture for which you are enrolled. In addition, all questions regarding grades must be addressed to your section's instructor.

Blackboard site: This course makes extensive use of the online Blackboard system. Please check the Blackboard site regularly for announcements, practice problems, and other course supplements. Exam grades are posted on Blackboard.

Midterm exams: Three (3) midterm exams will be given during class time on **Monday, September 21**; **Friday, October 23**; **and Friday, November 20**. The three midterm exams are each worth 20% of the final grade, for a collective 60% contribution to the course grade.

Final exam: A final exam will be given on **Tuesday, December 15 from 7:00 pm–10:00 pm,** locations to be announced. The final exam will be worth 30% of the course grade and will be comprehensive.

Homework: Access to the Mastering Chemistry website is required as all homework is submitted and graded online. Consequently, each of the 13 homework sets is due at 11:00 am on the date indicated on page 2 of this syllabus (typically on Mondays) and no late homework is accepted. A successfully completed homework set is one in which you correctly answer 75% of the questions within three attempts per question. Each successfully completed homework set contributes 1% of your final course

grade up to a maximum of 10%. In other words, three (3) homework sets can be dropped without affecting the final grade. No late or make-up homework sets will be accepted.

To access the *Mastering Chemistry* website, go to http://www.masteringchemistry.com. Click on Register Now and follow the instructions. **PLEASE PAY ATTENTION TO THE SECTION FOR WHICH YOU ARE REGISTERING!** The course ID is **CHEM103MELDRUM2015** (Sec. 1) or **CHEM103WALK2015** (Sec. 2), and your access code is packaged with the textbook if you bought it at the bookstore. If you purchased the textbook without an access code, you may buy access directly from the publisher (available at the *Mastering Chemistry* website). The eText is not required.

Additional practice problems from the end of each chapter are listed on Blackboard and the back of the tentative course schedule; they will not be graded and contribute nothing to your final grade. However, they may be useful for extra practice if you are struggling with a particular topic. The solutions to even-numbered, end-of-chapter problems (marked in red) are in the student solutions manual.

Grading policy:

To receive a grade in the A range in this course, you must have at least 90% of the points; the B range is at least 80%; the C range is at least 70%, and the D range is at least 60%. These thresholds may be lowered (i.e., it may become easier to get a higher grade), but they will not be raised. These absolute thresholds are designed to allow you to collaborate and work with other students in your course without fear of getting a lower grade if a peer performs well. Please teach one another and, while submitting only your own work, collaborate with your classmates.

Mastering Chemistry Homework Sets

| Problem Set # | Chapter(s) | Date Available (11:00 AM) | Date Due (11:00 AM) |
|------------------|------------|------------------------------|------------------------|
| 1 | 1, 2 | Aug. 26 | Sept. 7 |
| 2 | 2, 3 | Sept. 7 | Sept. 14 |
| 3 | 4 | Sept. 14 | Sept. 23 |
| 4 | 5 | Sept. 21 | Sept. 28 |
| 5 | 6 | Sept. 28 | Oct. 5 |
| 6 | 7 | Oct. 5 | Oct. 12 |
| 7 | 8 | Oct. 12 | Oct. 19 |
| 8 | 8 | Oct. 19 | Oct. 26 |
| 9 | 9, 10 | Oct. 26 | Nov. 2 |
| 10 | 10, 11 | Nov. 2 | Nov. 9 |
| 11 | 12 | Nov. 9 | Nov. 16 |
| 12 | 13 | Nov. 16 | Nov. 23 |
| 13 | 14 | Nov. 30 | Dec. 4 |