CHEM 1143

General Chemistry Lecture

MWF   8:00 A.M. – 8:50 A.M., Room Dillard 175

Instructor: Randal Hallford, Ph.D. Associate Professor of Physical Chemistry

Office Hrs: Posted online. Phone: 397-4187, randal.hallford@msutexas.edu Dillard 279

Web Page: Portal.

Textbook: Mandatory: Dickerson, Gray and Height D2L/Portal download recommended reference text: Openstax 2nd edition textbook download. Not the "Atoms First" version https://openstax.org/details/chemistry.

mcmillanlearning.com homework service is mandatory. Be certain to enroll under your name used with the MSU Registrar. No nicknames or other aliases.

Supplemental Material: Library reference materials, Student Solutions Guide download.

Prerequisite: enrollment in Math 1233 (College Algebra) and completion of High School Chemistry or CHEM 1103/1203 (introduction to Chemistry)

Exams

Examination schedule:

Dickerson et al chap.	Openstax chap.	
1. Atoms Molecules and Ions	2	
2. Mass and Stoichiometry	3,4	
3. Gas Laws and Kinetics	9	(Takehome quiz)

Exam 1

8. Quantum theory	6	
9. Electronic properties	6,7	
10. Redox	4	

Exam 2

11. Lewis Structures and VSEPR	7,8	
12. MO theory I	7,8	
13. MO theory II	7,8	

Exam 3

14 The Chemical Bond	7	
15 First Law of Thermodynamics	5	

Final Exam: Comprehensive ACS National exam

*Calculators with large memory capacity, mathematical solution software, and chemistry software are NOT allowed on exams. ***The use of such a calculator on an exam constitutes cheating.*** (single-line scientific calculators are acceptable)*. I may check the memory of any calculator during an exam.* <u>Cell phones may not be used for a calculator</u>.

Cell phones, computers, PDA's and other electronic devices are NOT allowed during class. **Cell phones must be OFF** during any scheduled class period.

Grading:	3 one-hour exams @ 100 pts each		300 (43.0%)
	1 ACS comprehensive final exam @ 200 pts		200 (28.5%)
	10 homework sets @20 pts each		200 (28.5%)
	total possible		**700 points**

Grade Mid-Term Report: At the midterm point students who are at risk for earning a D or an F in the course at that point will have a midterm grade issued on the webworld. Midterm grades will NOT be reported to the Registrar or on your transcript, nor will they be calculated in the overall grade. Students receiving this midterm report should immediately seek assistance by scheduling a meeting with the professor.

Grading Scale: Grades will be assigned as follows (unless otherwise noted): **A**: 90-100%; **B**: 80-89%; **C**: 70-79%; **D**: 55-69%; **F**: <55% (of total points)

Under no circumstances will make-up exams or extra assignments be given. <u>One</u> missed exam may be made up based on the comprehensive final exam (substitute final exam score for the missed exam score) if unavoidable medical circumstances exist.
The evaluation of student material is the domain of the instructor. Standard grading policy is followed without exception. Exam errors may be handled by removing the required points from the exam total, but credited if answered correctly for multiple choice format questions. The class average will be determined by the performance of the class. We will adhere to MSU's standard policy. **Refer to the MSU website calendar for the final exam date.** Questions about the grading of any assignment should be brought to the instructor within *one week* after the assignment is returned. Scores are reported after each exam.

Note: By enrolling in this course, the student expressly grants MSU a "limited right" in all intellectual property created by the student for the purpose of this course. The "limited right" shall include but shall not be limited to the right to reproduce the student's work product in order to verify originality and authenticity, and for educational purposes. All materials associated with this course are copyrighted by MSU, the text publisher and the instructors, and may not be published on social media, websites or other means without the express written permission of MSU, the publishers and the instructors. This includes any recordings made in class.

Drop Policy: Dropping from the course after the last drop date assigns a grade of **F**. If the lecture is dropped, the lab may also need to be dropped.

Attendance: Attendance to lecture is required. Students are responsible for all material presented in class and in assigned material. <u>In-class exercises will not be provided outside of class</u>.[1]

Studying: It is important to study outside of class on a regular basis; working problems is the best way to learn chemistry. Required or suggested problems will be due at the **start** of class on the due date.

Academic Dishonesty: Cheating on any exam, quiz or lab report will be regarded as academic dishonesty and ***may be subject to a zero or a final course grade of F***. See calculator requirements above.

General Education Statement: Students in this course must demonstrate their competency in reading, writing, and fundamental math skills through satisfactory completion of all assignments.

Americans w/ Disabilities Act Compliance: If any student needs special accommodations, the Office of Disabled Student Services Clark Student Center, room 108 (397-4618), and the instructor will provide a reasonable and fair opportunity to perform in this class. Please inform the Student Service as early as possible.

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[1] Refer to the MSU handbook for University policies about academic honesty and class attendance

nd-Energy Calculations   *584 The*
Heat of Formation of Benzene   *585*
Postscript: Count Rumford versus the World   *594*   **560**

Student Agreement for CHEMISTRY 1143

1) I have in my possession a copy of the course syllabus that outlines my obligations for remaining enrolled in this course. I am aware that missing three (3) class periods without an acceptable excuse will result in my being dropped from this course. Missing more than three class periods for any reason requires permission from the Dean of Students office.

2) Further, I realize that my grade for this course includes homework assignments. Failing to complete the homework will result in a low grade, and so I agree to work homework sets throughout the semester to maintain my overall grade in the course.

3) Midterm examinations are a part of my overall grade and I agree to be present for each exam, or to have arranged with the Professor to take them early if I am required to miss class during an examination period due to any acceptable MSU obligations.

Signature of student: _____

Printed name of Student: -
_____

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