

COURSE SCHEDULE - CHEM 122 - SPRING 2009

TEXTBOOK ABBREVIATIONS

RGM- Reger, Goode, & Mercer, Chemistry Principles & Practice, 2nd Edition

SSM - Shakhshiri, Schreiner, & Meyer, Workbook for General Chemistry Audio-Tape Lessons, 2nd Edition

DW - Davis & Witten, Study Guide\Workbook for Chemistry Principles & Practice, 2nd Ed. (**Optional, highly recommended**)

JD - John DeKorte, Student Solution Manual, (**Optional, highly recommended**)

M - Molecular Structure Models, Type C (for Organic Chemistry), made by MARUZEN

WEEK #	LECTURE and RECITATION TOPICS	CHAPTER HW PROBLEMS	AUDIO-TAPE LESSON
WEEK 1 1/20 to 1/26	RGM Chapter 10 Molecular Structure and Bonding Theories	10.26 ,10.28 ,10.36 ,10.46 , 10.60 ,10.72 ,10.82 ,10.94 , 10.100,10.108,10.114,10.124	SSM Lesson #13, Molecular Geometry
WEEK 2 1/27 to 2/2	RGM Chapter 10 - continued		Same Lesson as Week #1; You have 2 weeks to complete SSM Lesson #13
WEEK 3 2/3 to 2/9	RGM Chapter 11 Liquids and Solids	11.24 ,11.34 ,11.44 ,11.46 , 11.50 ,11.54 ,11.64 ,11.70 , 11.76 ,11.84 ,11.86 ,11.90	SSM Lesson #14, Valence Bond Theory and Hybridization
WEEK 4 2/10 to 2/16	RGM Chapter 11 - continued		SSM Lesson #15, Selected Chemistry of the Halogens
WEEK 5 2/17 to 2/23	Review material of Chapter 4; Stoichiometry II: Chemical Reactions in Solution	4.18 ,4.20 ,4.22 ,4.44 , 4.48 ,4.66 ,4.78 ,4.86 , 4.90 ,4.106,4.107,4.110	No Scheduled Assignment
COMMON EXAM. #1 - FRIDAY, 2/20/2009 - Covers: RGM Chapters 10 and 11 - Other Details Announced in Class			
WEEK 6 2/24 to 3/2	RGM Chapter 12 Solutions	12.32 ,12.42 ,12.54 ,12.60 , 12.68 ,12.70 ,12.76 ,12.84 , 12.86 ,12.94 ,12.96 ,12.98	SSM Lesson #16, Colligative Properties of Solutions
WEEK 7 3/3 to 3/9	RGM Chapter 12 - continued		No Scheduled Assignment

WEEK 8 3/10 to 3/23	RGM Chapter 13 Chemical Kinetics (<u>SPRING RECESS = 3/16 to 3/22</u>)	13.18,13.22,13.30,13.36,13.40, 13.46,13.48,13.50,13.54,13.60, 13.72,13.74,13.80,13.88	SSM Lesson #23 Chemical Kinetics
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WEEK 9 3/24 to 3/30	RGM Chapter 13 - continued		SSM Lesson #6: Mole Fraction, Molality, and Molarity
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COMMON EXAM. #2 - FRIDAY, 3/13/2009 - Covers: RGM Chapter 12, 13, - Other Details Announced in Class

WEEK 10 3/31 to 4/6	RGM Chapter 14 Chemical Equilibrium	14.14,14.18,14.28,14.32,14.34, 14.38,14.42,14.52,14.56,14.66, 14.68,14.72,14.80,14.90	SSM Lesson #17 Chemical Equilibrium in Gaseous Systems
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WEEK 11 4/7 to 4/14	RGM Chapter 14 - continued (<u>GOOD FRIDAY = 4/10</u>)		SSM Lesson #18 Acids and Bases
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WEEK 12 4/15 to 4/21	RGM Chapter 15 Solutions of Acids and Bases	15.24,15.30,15.34,15.40,15.46, 15.52,15.60,15.62,15.68,15.70, 15.78,15.85,15.86,15.92	SSM Lesson #19 Ionization of Weak Acids and Bases
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COMMON EXAM. #3 - FRIDAY, 4/24/2009 - Covers: RGM Chapter 14 - Other Details Announced in Class

WEEK 13 4/22 to 4/28	RGM Chapter 15 - continued		SSM Lesson #22 Solubility Equili Calculations; K_{sp}
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WEEK 14 4/29 to 5/5	Review Unfinished Work "Bit's 'n Pieces"		No Scheduled Assignment
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January 19 (Monday) - Martin Luther King Holiday ; No classes - Institute Closed

January 20 (Tuesday) - First Day of class

March 16-22 (Monday to Sunday) - Spring Recess

April 10 (Friday) - Good Friday No classes – Institute Closed

May 5 (Tuesday) – Classes follow a Friday Schedule

May 5 (Tuesday) - Last day of classes

May 6 (Wednesday) - Reading day for Final Exam Preparation

May 7-13 (Thursday to Wednesday) - Final Exam Period.

Date, Time, and Location of the Final will be announced toward the end of the semester.

NOTE WELL: No Student may be enrolled in CHEM 122 unless he or she has either received credit for or has passed CHEM 121.

IMPORTANT INFORMATION - PLEASE READ CAREFULLY

You will be held accountable for both knowing the information and for following the instructions given in the following pages

CLASS SCHEDULE There are no classes on Monday, January 19th (Martin Luther King), March 16th-22nd (Spring Recess) and April 10th (Good Friday). Monday, March 30th is the last day to drop the course without penalty (that is, with a grade of "W"). The last day of classes is Tuesday, May 5th - see the end of the previous page for other information about the semester schedule.

LECTURES, RECITATION Students are expected to read the specified textbook material **before** coming to class. See below for attendance policy. Instructors may spend more or less time on the topics listed; they may be one or two topics ahead or behind. During Week #1, your instructor will explain the structure of the course. New material is introduced and discussed in lecture. During recitation: (a) the subject matter is repeated and reinforced, (b) questions are answered, (c) homework problems are discussed and solved, (d) quizzes may be given, and (e) new material may be introduced, taught, and discussed.

ATTENDANCE POLICY Attendance is required at all meetings of this course. Three unexcused absences are tolerated - these include undocumented illness and absences due to personal difficulties. For an excused absence, you must submit documentation to your instructor and obtain his or her approval. Attendance is worth 70 points; 10 points are lost for each unexcused absence beyond three (*see end of next page for course grading*).

HOMEWORK Your recitation instructor may assign homework problems different from those listed in this course schedule. All homework assignments must be worked out and submitted according to the specific directions and requirements of your recitation instructor. Late homeworks usually receive a grade of zero. Solutions to the listed homework problems will be posted on the CHEM 122 bulletin board. Please bring to the attention of Dr. Bob Conley (Room 352T; Ext 3277) any mistakes found in these posted solutions.

AUDIO-TAPE LESSONS All students enrolled in CHEM 122 are required to come the CHEMISTRY LEARNING CENTER (CLC), Room 110T, and work out each scheduled audio-tape lesson during the week specified. Only half credit will be given if the scheduled lesson is completed one week late; thereafter, no credit will be given. The hours that the CLC is scheduled to be open are posted on the door. If the CLC is not open when it is supposed to be, contact either Dr. Bob Conley (352T) or the department administrative assistant (Gayle Katz) in the Chemistry Office (Room 384T). Dr. Bob or the department administrative assistant will then decide if you need more time to complete that week's lesson. The CLC monitors will examine your workbook and give any further instructions. When you are finished with the lesson, show your completed assignment in the workbook to the CLC monitor. You will then be credited for the lesson.

AUDIO-VISUAL PRESENTATIONS Video-Tape presentations, sponsored by the CLC and intended to help you with topics being discussed in class, will be offered according to the schedule found on the next to the last page of this course outline. Short summary outlines are given on the last page of this course outline. Full summary outlines are given to the students who attend these video presentations. These sessions are not compulsory and will be run informally by Dr. Bob Conley. Details as to time, place, and any changes in the schedule of presentations will be posted weekly in the CLC, and on the CLC bulletin board by Room 114T.

WHERE TO GO FOR HELP Tutoring is available on both a walk-in and appointment basis at the University Learning Center located in Room 200 in Kupfrian Hall. or more information call (973) 596-2992 between 8:30 am to 7:30 pm (Mon-Thu) Fridays 8:30 to 4:00 pm. Tutoring opportunities are usually announced in the Advertisement section of the University newspaper (the VECTOR). Do not wait until it is too late to seek help. If you continue to have academic difficulty with CHEM 122, you are encouraged to make an appointment to talk with your instructor. Instructors usually announce their office hours during the first week of the semester and these office hours are also posted on their office door. Students are also reminded that Dr. Sharon Morgan in the office for first year students, 212 Campbell Hall, (x2981), may be of some assistance.

COMMON EXAMINATIONS Three common examinations will be administrated throughout the semester. No books, notes, tables, or scrap paper will be allowed. *Calculators but not hand held computers are permitted.* Calculators with battery operation only are permitted. Students must bring *two #2 pencils* to all exams, and four #2 pencils to the Final Exam. Students must know their social security numbers for every examination.

Information describing the format of the common exams will be given by your Lecture Instructor. The Final Exam will cover the entire semester's work with special emphasis on material covered after Common Exam #3. This exam will be 135 minutes long and will consist of machine graded multiple choice questions and problems only.

One *make-up examination* will be permitted if there is an acceptable and substantial reason, but a \$5.00 fee is required - see section on SPECIAL EXAM FEE in your catalog. A grade of zero will be given for a second missed examination independent of reason. Additional details concerning exams will be given by your Lecture Instructor.

Students are reminded that violations of the NJIT student Honor Code are serious and that the Chemistry Division will make an extraordinary effort to prevent *CHEATING* on all examinations and will vigorously prosecute cases of cheating, if any, in accordance with NJIT policy and procedures. Students are hereby notified that computer crosschecking and statistical analytical methods are used, in addition to the more traditional methods, to detect and deter cheating.

COURSE GRADING *Common Exams #1, #2, and #3* total 300 points maximum; *Final Exam* is 250 points maximum. *Recitation* scores (homework and quizzes) will be statistically adjusted to an average of 85 ± 20 with a maximum of 125 points; *Learning Center* (audio-tape lessons) scores total to 80 points maximum; *Class Attendance* maximum is 70 points. The total maximum score is 825 points. A minimum passing score such as 488 points will be established. The Chemistry Division reserves the right to change this minimum passing score at the close of the semester. Because of the weakness in the statistical significance of just a few points out of 825, borderline cases will be considered subjectively by all faculty and staff members involved in CHEM 122. Please be advised that conduct, attitude, and a student's apparent effort will be among factors employed in judging borderline cases.