

MARTIN COMMUNITY COLLEGE
COURSE SYLLABUS
Spring 2011

COURSE NUMBER:	CHM 090 (01)	INSTRUCTOR:	Donald Rote, MS
COURSE TITLE:	Chemistry Concepts	OFFICE NO:	NA
CREDIT HOURS:	4	OFFICE/VIRTUAL HOURS:	Email instructor
CONTACT HRS/WK:	4	PHONE NO:	Contact Dr. Broughton @ 252-789-0246
PREREQUISITES:	None	FAX:	(252) 792 – 0826
COREQUISITES:	None	E-MAIL:	drote@mcc.martincc.edu

COURSE DESCRIPTION: This course provides a non-laboratory based introduction to basic concepts of chemistry. Topics include measurements, matter, energy, atomic theory, bonding, molecular structure, nomenclature, balancing equations, stoichiometry, solutions, acids and bases, gases, and basic organic chemistry. Upon completion, students should be able to understand and apply basic chemical concepts necessary for success in college-level science courses.

PROGRAM LEARNING OUTCOMES:

1. Apply critical thinking skills to problem-solving.
2. Demonstrate use of appropriate discipline-related technology.
3. Demonstrate entry level skills needed for first college-level course in the curriculum.

COURSE LEARNING OUTCOMES:

At the completion of this course the students should be able to:

1. Explain basic chemical concepts necessary for success in college-level science courses.
2. Apply basic chemical concepts necessary for success in college-level science courses.
3. Analyze basic chemical concepts necessary for success in college-level science courses.

Other Course Outcomes:

1. Relate chemistry and chemicals to today's society.
2. Outline the scientific method.
3. Describe the use of measurements in scientific studies.
4. Discuss the classification of matter as it relates to states of matter, temperature, energy and specific heat.
5. Discuss the history of the development of the atomic theory.
6. Explain the significance of the Periodic Table of Elements.
7. Describe the uses of electromagnetic radiation, orbital diagrams and electron configurations as they apply to our concept of the atom.
8. Name and write formulas for various inorganic compounds.
9. Name and write formulas for various organic compounds.
10. Explain the concept of a mole and how it is used in chemical calculations.
11. Relate the law of conservation of matter to chemical reactions.
12. Perform various chemical calculations involving percentage composition, molecular formulas, and energy reaction.
13. Compare and contrast the structures of solids and liquids.
14. Describe the properties of gases and what factors affect them, such as temperature and pressure.
15. Describe solutions and calculate percent composition.
16. Explain and demonstrate the concept of chemical equilibrium.
17. Discuss the various properties of acids and bases with an outlook toward their uses in society.
18. Explain the properties of redox reactions and their uses in society.
19. Describe nuclear radiation and its properties.
20. Discuss the pros and cons of nuclear power.

REQUIRED TEXTBOOK: Timberlake & Timberlake. *BASIC CHEMISTRY*, 3rd ed. Prentice Hall (2005).

SUPPLEMENTAL RESOURCES: Basic calculator, pencils, pens, and paper

LEARNING/TEACHING METHODS:

Lecture, student discussion, guided and independent practice, cooperative learning lab activities and outside reading assignments.

NOTE(QEP): Outside reading assignment will be a prepared Reader's Response Journal for a published article dealing with organic chemistry research. A copy of the intended article must be provided for the instructor's approval. Your paper must follow the directions provided to you on writing a Reader's Response Journal.

ASSESSMENTS/METHODS OF EVALUATION:

Any extra credit assigned will be added to the student's lowest test grade.

Outside Reading Assignment	15%
Tests (6)	60%
Quizzes	10%
Final Exam	15%
Total	100%

GRADING POLICY:

Grades will be assigned on the following scale:

90 – 100%	A
80 – 89%	B
70 – 79%	C
60 – 69 %	D
>60%	F

COURSE OUTLINE:

Date	Topic, Reading, Assignment, and /or test chapters
Week 1	Chapter 1 & 2
Week 2	Chapter 3
TEST #1	Chapters 1, 2, & 3
Week 3	Chapters 4
Week 4	Chapter 5
TEST #2	Chapters 4 & 5
Week 5	Chapter 6
Week 6	Chapter 7
TEST # 3	Chapters 6 & 7
Week 7	Chapter 8
Week 8	Chapter 9
TEST # 4	Chapters 8 & 9
Week 9	Chapter 10
Week 10	Chapter 11
TEST # 5	Chapters 10 & 11
Week 11	Chapter 12
Week 12	Chapter 13
TEST # 6	Test #6 Chapters 12 & 13
Week 13	Chapter 14
Week 14	Chapter 15
Week 15	Chapter 16
FINAL EXAM	Test Chapters 14, 15 & 16

STUDENT ATTENDANCE POLICY: The Martin Community College Attendance Policy (Martin Community College Career Catalogue Addendum for Fall 2007) is in effect, as well as the administrative withdrawal policy (Martin Community College Career Catalogue Addendum for Fall 2007). Students must attend at least once within the first 10% of the scheduled hours of the class in order to be enrolled, or their names will be removed from the attendance roster. Students missing more than 6 (six) contiguous contact hours without contacting, and speaking to the instructor or more than 10% of the total contact hours may be administratively withdrawn from class, and in that case will receive a “WF” which counts as an “F” as their final grade. Students may only be readmitted to class with the written approval of the instructor, as the instructor must file a form with the registrar in order to readmit the student. Students who have been administratively withdrawn from a class will not be allowed in the lab or classroom for liability reasons. If a student is officially readmitted to a class the student is responsible for all material covered, including any announcements, such as test dates made while he/she was out. A student may remove the “WF” grade by submitting appropriate paperwork for an official withdrawal by the last day to officially withdraw without receiving an “F” during the semester to the Registrar’s office. The last day to officially withdraw from this class is 3/24/11.

REQUEST FOR EXCUSED ABSENCES FOR RELIGIOUS OBSERVANCES*

***In compliance with G.S. 115D-5, MCC policy permits a student to be excused, with the opportunity to make-up any test or other missed work, a minimum of two excused absences per academic year for religious observances required by the student’s faith. The policy limits the excused absences to a maximum of two days per academic year.**

Students who wish to be excused for a Religious Observance required by their faith must complete and submit a request form to the instructor(s) prior to the census date of each class. The *Request for Excused Absences for Religious Observances* form can be picked up from Student Services. This does not supersede the college-wide attendance policy as outlined in the college catalog or syllabus, with the exception of a reasonable accommodation for the make-up of missed course work.

COURSE POLICIES:

TESTING POLICY:

All tests will be announced at least two class periods before the test date. Students must notify the instructor **BY EMAIL** (this allows verification of time), **BEFORE** the test in order to qualify for a makeup. If a student fails to take a test at the announced time, he or she must provide a written, verifiable, medical reason for the absence in order to qualify for a makeup. Students may make up ONE exam if the student has such a reason. A 10-point per day penalty will be assessed for each day the makeup test is not taken immediately upon returning to class, including weekends. After four days a grade of zero will be given to those students who have not made up work. There will be no additional makeup, regardless of the reason for the absence. If you miss an arranged time for a makeup, this will count as an additional missed exam, resulting in a zero grade for that exam, and loss of make up privileges for all future missed work.

ACADEMIC INTEGRITY POLICY:

Lying, cheating and plagiarism are forms of academic dishonesty that violate the integrity of any academic process and will not be tolerated. Please read the Student Governance and Conduct Code in the 2009-2011 Martin Community College Career catalog.

OTHER COURSE POLICIES:

Students are expected to read the topics to be discussed in class before coming to class that day. This will give you a leg up in understanding the discussion for the day, and allow you to participate in an active way. Extra credit points in the form of pop quizzes are always a possibility.

No food or drink is allowed in the classroom, or laboratory, as this is a violation of OSHA standards.

Attendance is taken at the beginning of class each day. **If you are tardy, it is your responsibility to have the instructor not the appropriate change on the attendance roster.**

It is your responsibility to keep track of your absences. The instructor need not warn you if you are close to or over the limit.

Three tardies are counted as one hour of absence for attendance purposes.

Confirmed Test Dates are announced two class meetings in advance! If you are absent on the day a test is announced, you are still responsible for taking the test on time.

Cell phone use in class is prohibited. If your cell phone goes off during a test, you will receive a zero for the grade for that test

If you cannot reach your instructor, you may contact Phyllis J. Broughton, Ed.D., Dean of Academic Affairs and Student Services at 252-789-0246 or 252-789-0247 by phone, pbroughton @martincc.edu by e-mail, or in person at his/her office in Building 2, Room 33.

To access the Martin Community College Career Catalog for policies and curriculum requirements, please go to www.martincc.edu.

If you have a need for a disability-related accommodation, please notify the Student Services counselor at (252) 789-0293.