Hagerstown Community College
MASTER SYLLABUS

COURSE: CHM **102** – **CHEMISTRY PROBLEM SOLVING: RECITATION - 1 credit**

INSTRUCTOR: Nancy Thorpe

COURSE DESCRIPTION:
This course is for students who are enrolled in CHM 101 and want increased formal instruction and additional practice in problem-solving skills required for success in CHM 101, Introductory College Chemistry. Prerequisite: MAT 099 or equivalent placement test score. Co-requisite: CHM 101. Offered both fall and spring semesters. 30 contact hours. 1 Credit. 10 week course.

TEXTBOOK:
Foundations of College Chemistry Alternate 14TH ed., by Hein and Arena. J. Wiley & Sons, Inc, 2014. (ISBN: 978-1-118-429823-7);
Study Guide for Foundations of College Chemistry Alternate 14TH ed., by Rachael Porter. J. Wiley & Sons, Inc, 2014. (ISBN: 978-1-118-28900-6) – required.
Students will also need: **scientific calculator** (not graphing calculator).

STUDENT LEARNING OUTCOMES:
At the completion of this course, students should be able to:
1. Apply fundamental mathematical skills, scientific notation, and significant figures to chemical concepts and data.
2. Communicate chemical information using symbols, formulas, equations and appropriate IUPAC nomenclature.
3. Organize and evaluate numerical measurements using dimensional analysis to setup and solve problems
4. Access, process, analyze and synthesize scientific information.
5. Apply learned course material and critical thinking in further science courses, such as Human Anatomy and Physiology.
6. Successfully complete the Introductory College Chemistry course.

TOTAL HOURS OF COURSE WORK EXPECTED:
The total work required to earn one college credit – 150 hours/semester, or 15 hours/week during a 10 week semester (includes class time plus additional homework/study time outside of class).

Please be aware that certain courses, or certain students, may require more than *minimum* hours of work per credit each week in order to be successful in that course.

Credit Hour to Clock Hour Calculation (for 1 credit course)
    Direct Faculty Instruction: One hour Instruction/week/credit
            (90 min * 10 weeks) ÷ 60 min/h = 15.0 h/credit * 1 credits = 15 hours
    Student work out of classroom: (Two hours per credit per semester)
            (2*90 min * 10 weeks) ÷ 60 min/h = 30.0 h/credit * 1 credits = 30 hours

	Direct Faculty Instruction (in-Class) (2 h/week)	Student work outside of class (25 h)
"Lecture" time	20 h	
8-9 quizzes	(included in lecture time)	9 h (quiz prep)
Homework Assignments		16 h
TOTAL	**45 hours**	