



NORTHWEST FLORIDA STATE COLLEGE

CHM1045C, College Chemistry I, 4 credit hours

Fall 2016

- Professor: Dr. Katie Whitaker
- Office Hours: Available by appointment
- Science Department Phone: 850-729-5376
- Email: whitakek@nwfsc.edu
- Final Exam: Friday, December 9, 6:30-8:20 PM
- Reference Number: 10503
- Campus/Room: Fort Walton Beach Campus, Science Building Room 616
- Class Days: Tuesday, Thursday
- Class Times: 6:30-9:20 PM
- Electronic Resources:
 - Mastering Chemistry for online homework: www.masteringchemistry.com
 - D2L for course handouts, information, etc.: www.nwfsc.edu

Course Description

College Chemistry I - CHM 1045C, 4 credit hours. Quantitative approach to modern theoretical and descriptive chemistry with appropriate development of laboratory technique. Includes symbols, formulas, equations, atomic structure, bonding, states of matter, stoichiometry, thermo-chemistry, solutions, colloids, molecular orbitals, periodicity and properties. A two semester sequence in general chemistry with laboratory exercises and demonstrations. University transfer credit.

Course Prerequisite

MAC 1105 required; high school Chemistry or Physics, CHM 1020 or PHY 1020 advised.

Course Materials

Chemistry 1: A Molecular Approach, 4th Edition, Nivaldo Tro (ISBN: 9781323431146) with Mastering Chemistry access code (packaged with book in the campus bookstore)

Chemistry Lab Manual, Kurt Teets (ISBN: 9780536791160)

Nonprogrammable scientific calculator such as TI-30X IIS

Safety goggles rated for chemical splash

Student Learning Outcomes

NS-1: The student will demonstrate an understanding of the scientific method, distinguishing between fact, scientific law, hypotheses, and theory; and recognizing the difference between scientific and non-scientific explanations.

NS-2: The student will interpret data, given in problem form or obtained experimentally, in order to demonstrate problem-solving skills (critical thinking), develop testable explanations, or distinguish the difference between correlation and causation.

NS-3: The student will demonstrate fundamental knowledge of the terminology, major concepts, and theories of at least one field within the physical sciences, and in the biological sciences.

NS-4: The student will relate scientific discoveries and theories to broader areas of human concern.

Grading Procedures

Exams (40%) – Four exams will be given during the course of the semester (see course calendar posted on D2L). Exams will cover material from lecture and the textbook as well as Mastering Chemistry assignments.

No exam grades will be dropped, however if the final exam grade is higher than the lowest exam grade, then the final exam grade will replace the lowest exam grade. No make-up exams will be given. If an exam is missed, even with an excused absence, that zero grade will be the student's lowest exam grade that is replaced by their final exam grade. If more than one exam is missed during the semester, those exams will retain a grade of zero points.

Final Exam (20%) – The final exam will be the American Chemical Society (ACS) Exam. A study guide is available for purchase in the campus bookstore.

Online Homework (15%) – Mastering Chemistry is an online homework system associated with the textbook. Our course ID is: **CHM1045C10503**. Following most lectures, corresponding Mastering Chemistry questions will be assigned to provide practice on the covered material. Exact due dates can be found on the course calendar posted on D2L. All assignments must be submitted by 11 PM on the specified due date, or the student will receive a score of zero for that assignment. The lowest homework grade will be dropped.

Students are responsible for establishing their Mastering Chemistry accounts and resolving any technical difficulties well in advance of due dates. An Introduction to Mastering Chemistry practice assignment is available to familiarize the student with the features of the program.

Chemical & Engineering News Assignment (5%) – Students will read a recent issue of Chemical & Engineering (C&E) News and write a one-page essay about an article that they found interesting. After the essays are turned in, each student will then be assigned essays of two classmates to read and critique. Detailed instructions will be provided on D2L.

Pre-lab Quizzes (10%) – Prior to select laboratory experiments (see calendar on D2L), students will take pre-lab quizzes. Quizzes will take place immediately before the experiment and cover the experiment to be done. These quizzes will test whether students understand what they are doing in the laboratory and why. To prepare for pre-lab quizzes, students should read the entire experimental write-up and be able to answer the review questions. The lowest pre-lab quiz score will be dropped.

Lab Reports (10%) – Students will turn in lab reports for each experiment performed in the course. Lab reports will include a cover sheet with the student's name, the title of the experiment and lab partner's name (if applicable), any data sheets filled out during lab, any assigned

problems and all calculations. Calculations must be shown in their entirety using correct significant figures and units for full credit and can be written in the space provided or on an additional sheet of paper. Work must be legible to be graded. Generally, students will work individually in the lab. When group work is done, every student must turn in their own lab report that reflects their own work. Only the data will be the same. Lab reports are due at the beginning of class, one week after the experiment unless otherwise noted (see course calendar on D2L). Late lab reports will not be accepted. The lowest lab report score will be dropped.

Course Grade Determination

Course Grade = $0.40 \times (\text{Exams grade}) + 0.20 \times (\text{Final Exam grade}) + 0.15 \times (\text{Homework grade}) + 0.05 \times (\text{C\&E News grade}) + 0.10 \times (\text{Pre-lab Quiz grade}) + 0.10 \times (\text{Lab report grade})$

Grade Scale

A: 90-100% B: 80-89% C: 70-79% D: 60-69% F: 0-59%

Incomplete Grades

At the discretion of the instructor, an incomplete grade ("I") may be awarded when the student is unable to finish the required work because of unforeseen extenuating circumstances such as illness or TDY assignment. To receive an "I" grade, the student must have successfully completed a significant portion of the required coursework and be able to finish the remaining work without attending class. An "I" grade will automatically convert to a grade of "F" if the student does not complete the remainder of the coursework by the established deadline.

FA Grades

Both the F and FA are failing grades, are calculated as such in the student's GPA, and show up on the student's transcript. A student's GPA and his or her time-to-degree are both factors in qualifying for future aid as outlined in the College's Standards of Satisfactory Academic Progress: ([http://catalog.nwfsc.edu/content.php?catoid=9&navoid=1489#Return of Title IV Financial Aid Funds](http://catalog.nwfsc.edu/content.php?catoid=9&navoid=1489#Return_of_Title_IV_Financial_Aid_Funds)).

Make-up Work

Make-up exams will not be given. Instead, the final exam grade will replace the grade of one missed exam (the lowest exam grade). Make-up labs will not be given, but the lowest pre-lab quiz score and the lowest lab report score will be dropped.

In general, assignments will not be accepted after the due date. Late assignments will receive a grade of zero. Under rare circumstances, extensions may be granted at the discretion of the instructor, on a case-by-case basis.

Email

The best way to contact the instructor is via email (whitakek@nwsc.edu). Students can expect a response within 24 hours on weekdays and 48 hours on weekends.

Class-wide communications will also be sent via email. Students are responsible for checking their NWFSC email accounts on a regular basis to keep up with class announcements and notifications, and College notifications.

Desire 2 Learn

Like all NWFSC classes, this class uses Desire 2 Learn (D2L), a platform for online learning. You can access this class's D2L site at [Desire 2 Learn](#), or through RaiderNet. You will find the class syllabus, the course calendar and other resources on D2L.

Course Calendar

The course calendar will be posted on D2L. The calendar shows the due dates for all assignments, the dates of exams, and the lab schedule. The calendar is subject to change according to circumstances (course progress, hurricanes, etc.). Students are responsible for announcements made in lecture or communicated electronically regarding changes.

Calculator

A nonprogrammable, scientific calculator is required for the course. Graphing/programmable calculators may not be used. The student should bring their calculator to every class and know how to use it. Cell phones and other electronic devices may not be used in the place of a scientific calculator.

Laboratory Experiments

All students are required to complete safety training for the given semester before beginning work in the laboratory. Safety training will be conducted in class on August 25. Any student who misses the in-class training is responsible for scheduling a make-up safety training with the instructor outside of class time. No students will be permitted to complete any experiments until safety training is complete.

Experimental write-ups can be found in the Chemistry Lab Manual or as printable handouts posted on D2L. The course calendar posted on D2L provides the titles and dates of the experiments and specifies either the page number of the write-up or D2L to indicate it is a handout. Students are responsible for printing and bringing the laboratory handouts as appropriate; handouts will not be provided in class by the instructor.

Laboratory Attire

Safety goggles rated for chemical splash must be worn over the eyes at all times in the chemistry laboratory. Closed-toed shoes and full-length pants must be worn. Any clothes worn in the laboratory may suffer stains, discoloration or holes; do not wear clothes to lab that you would regret ruining. Students who are not properly attired will not be permitted to participate in lab and will receive a zero for the given experiment.

Class Attendance

Attendance to every class is strongly recommended and the student is responsible for all material presented in class whether present or not. Attendance is required on exam days. Students who stop attending class may receive a failing grade of "FA." An "FA" grade is a failing grade in GPA calculations and may impact the receipt of federal aid in subsequent courses. Students traveling

for college-approved activities will not be penalized academically but will be responsible for missed work.

Students should arrive to class on time or early and expect to stay for the entire class period. All students are expected to complete exams and quizzes in the allotted time period. Students who arrive late forfeit all time missed.

Cell Phone/Electronic Devices

Cell phones, pagers, and other such electronic devices must not distract from learning. Courtesy to the professor and other students requires that phones be on silent mode and put away during class. No student should initiate conversations, including texts, during class activities. Use of electronic communication devices during examinations or other graded activities may constitute grounds for disciplinary action; such devices must be completely out of sight during exams or other assessments. Where emergency or employment situations *require* access to electronic communication services, arrangements may be made *in advance* with the instructor.

Emergency College Closure

In the event of unusual or extraordinary circumstances, the schedule, requirements, and procedures in this course are subject to change. If the college closes for inclement weather or other emergency, any exams, presentations, or assignments previously scheduled during the closure period will be rescheduled at the discretion of the instructor. Students are responsible for monitoring electronic communications regarding the revised schedule. If changes to graded activities are required, students will not be penalized as a result of the adjustments, but will be responsible for meeting revised deadlines and course requirements.

Children in the Classroom

As a courtesy to other students and the learning process, students may not bring children with them to class sessions. Health and safety concerns prohibit children from accompanying adult students in any lab, shop, office, or classroom or other college facility where potential hazards exist. If a child-related emergency means you must miss class, contact the instructor as soon as possible to determine your options. (The full “Children on Campus” policy statement appears in the College Catalog.)

Students Rights, Responsibilities, and Academic Integrity

Students are responsible for adherence to all college policies and procedures, including those related to academic freedom, cheating, classroom conduct, computer/network/e-mail use and other items included in the *Northwest Florida State College Catalog and Student Handbook*. Students should be familiar with the rights and responsibilities detailed in the current *Northwest Florida State College Catalog and Student Handbook*. Plagiarism, cheating, or any other form of academic dishonesty is a serious breach of student responsibilities and may trigger consequences, which range from a failing grade to formal disciplinary action.

RESOURCES

The Academic Success Center (ASC) is located in the Activities Center (Building 410) on the Niceville Campus. The ASC provides free learning support services such as tutoring, ESOL, and writing assistance for all NWF State College students. Individual and group tutoring is available in a wide range of subjects on a walk-in-basis and by appointment. For more information, call the Academic Success Center at (850) 729-5389 or visit our website at [Free Tutoring](#).

Math Labs are located in the Math Building (300), Room 131, on the Niceville Campus and in Building FW-47, Room 702 on the Fort Walton Beach Campus and Room 131 at the Robert L. F. Sikes Education Center at the Crestview Center. The math labs are open to all students and provide free walk-in tutoring for all mathematics courses. For lab hours, students may call the Math Department at (850) 729-5377 or visit our website at [Math Lab](#).

Smarthinking is an online, real-time tutoring offered free to students, who may access this service via RaiderNet.

Open Computer Labs

There are numerous open computer labs throughout the NWF State College campuses. Students may access our website for lab locations and hours: [Computer lab location and hours](#)

Testing Center

Testing Centers administer college admissions tests, placement tests, proctored exams, ACT/SAT, GED, CLEP, and DSST (formerly known as DAN TES). Make-up exams may be taken in the Testing Center, depending upon instructor policies on late work. General test information concerning tests, testing center locations, and hours may be accessed on the Testing Center website at [Testing Center](#).

Library, Online Reference Materials, and Resources

The library is a comprehensive, learning resource center providing information in print, digital, and multimedia formats to support the educational objectives of the College. In addition to in-house materials, online services and resources can be accessed through the Learning Resource Center website. Library hours are posted each semester at the building entrance and on the LRC website at [Learning Resource Center](#)

Assistance for Military and Veterans

Northwest Florida State College supports our military and veterans students. You may contact NWF State College Hurlburt Center Educational Services Building at 850-200-4190 or visit our website at [Support Our Military](#)

Students with Disabilities

Northwest Florida State College supports an inclusive learning environment for all students. If you have disabilities for which accommodations may be appropriate to assist you in this class, please contact the Office of Disability Support Services on the Niceville Campus, or call 850-729-6079 (TDD 1-800-955-8771 or Voice 1-800-955-8770).