Instructor: G. Malin
e-mail: gabriellemalin@dcccd.edu
Office: C202
Office hours: By appointment

Class Meetings:
Lecture: MTWR 5:30 pm – 7:30 pm N237
Lab: MTWR 7:40 pm – 10:10 pm S200

Course Description
CHEM 1411 General Chemistry I (4 Credit Hours) TCCNS: CHEM 1411: General Chemistry I 2014 Core Curriculum Foundational Component Area: 030 Life and Physical Sciences
This course is for science and science-related majors. Fundamental concepts of chemistry are presented including measurement and the metric system, the history of chemistry, the mole concept, chemical reactions and stoichiometry, energy and chemical reactions, states and properties of matter, the periodic table, chemical bonding, atomic and molecular structure, gas laws, and concentrations of solutions.

Textbooks and Other Course Materials:
2. Online Quiz / Homework: www.masteringchemistry.com (available with the custom edn. Text book)
3. Scientific calculator
4. Safety goggles

Prerequisites:
MATH 1314 or equivalent AND Developmental Reading 0093 or English as a Second Language (ESOL) 0044 or have met the Texas Success Initiative (TSI) Reading standard. High school chemistry is strongly recommended.

The Texas Success Initiative (TSI) is a statewide program designed to ensure that students enrolled in Texas public colleges and universities have the basic academic skills needed to be successful in college-level course work. The TSI requires assessment, remediation (if necessary), and advising of students who attend a public college or university in the state of Texas. The program assesses a student’s basic academic skills in reading, writing, and math. Passing the assessment is a prerequisite for enrollment in many college-level classes such as English 1301/1302, History 1301/1302, Math 1414, etc. Students who do not meet assessment standards may complete prerequisite requirements by taking developmental courses in the deficient area and passing them with a grade of C or higher. In some cases retesting will also be required. It is up to each student to be aware and informed about requirements that are subject to change. Additional information is available from the TSI Office.
https://www1.dcccd.edu/cat0910/admiss/tsi.cfm?loc=4

The instructor reserves the right to amend this syllabus as necessary
Student Learning Outcomes:
Upon successful completion of this course, students will:

**Lecture**
1. Define the fundamental properties of matter.
2. Classify matter, compounds, and chemical reactions.
3. Determine the basic nuclear and electronic structure of atoms.
4. Identify trends in chemical and physical properties of the elements using the Periodic Table.
5. Describe the bonding in and the shape of simple molecules and ions.
7. Write chemical formulas.
8. Write and balance equations.
9. Use the rules of nomenclature to name chemical compounds.
10. Define the types and characteristics of chemical reactions.
11. Use the gas laws and basics of the Kinetic Molecular Theory to solve gas problems.
12. Determine the role of energy in physical changes and chemical reactions.
13. Convert units of measure and demonstrate dimensional analysis skills.

**Lab**
Upon successful completion of this course, students will:
1. Use basic apparatus and apply experimental methodologies used in the chemistry laboratory.
2. Demonstrate safe and proper handling of laboratory equipment and chemicals.
3. Conduct basic laboratory experiments with proper laboratory techniques.
4. Make careful and accurate experimental observations.
5. Relate physical observations and measurements to theoretical principles.
6. Interpret laboratory results and experimental data, and reach logical conclusions.
7. Record experimental work completely and accurately in laboratory notebooks and communicate experimental results clearly in written reports.
8. Design fundamental experiments involving principles of chemistry.
9. Identify appropriate sources of information for conducting laboratory experiments involving principles of chemistry.

**Core Objectives:**
CHEM 1411 develops the following Core Objectives: **Critical Thinking** -to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information. **Communication** -to include effective development, interpretation and expression of ideas through written, oral and visual communication. **Empirical and Quantitative Skills** -to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions. **Teamwork** -to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal.

**Core Objective Development Statements:** CHEM 1411 develops **Critical Thinking** by exposing students to scientific experiments where they make conclusions about what they observe.
CHEM 1411 develops **Communication** by having the students explain either through written or oral communication questions where they explain scientific concepts covered in class.
CHEM 1411 develops **Empirical and Quantitative Skills** by having students performa laboratory exercises where quantitative data is obtained and analyzed, and by having students work out problems in the classroom and in on-line homework assignments.

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CHEM 1411 develops Teamwork by having the students work in groups in the classroom to solve a problems worksheet and by creating small groups to carry out experiments in the laboratory.

**Evaluation Procedures:**

**Grading:** Your performance in the lecture will be evaluated in midterm exams, assignments, writing exercises, quizzes and a comprehensive final exam. Short pop-quizzes will be given at any time of the classes. Average of the quiz grades will be taken for the final grade. All missed exams/quizzes will result in a score of zero. If it is to your benefit, the final exam grade will be substituted for the lowest midterm test grade. The course grade will be calculated in the following manner:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Attendance</td>
<td>5%</td>
</tr>
<tr>
<td>Mastering Chemistry Quiz</td>
<td>15%</td>
</tr>
<tr>
<td>Mid-term Exam (3 exams)</td>
<td>45%</td>
</tr>
<tr>
<td>Lab Experiments</td>
<td>25%</td>
</tr>
<tr>
<td>ACS Final Exam</td>
<td>10%</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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</tbody>
</table>

The overall grade for the course will be determined using the following distribution:

- A: > 90%
- B: 80–89%
- C: 70–79%
- D: 60–69%
- F: < 59.5%

**Writing Across the Curriculum:** Science courses at Eastfield College follow a principle of “Writing Across the Curriculum”. Each course incorporates a writing element. Writing is a critical part of the communication of ideas, and is important in the synthesis and analysis of scientific concepts. Writing in this course is accomplished through assignments and exams.

**The Laboratory**

1. There is a short safety and technique discussion at the beginning of each lab period. If you arrive late, you will not be allowed to participate in lab.
2. Proper dress code will be enforced in the lab (Info regarding this will be given on the first day of lab). **Instructor may ask the student to leave the lab if this code is not followed.**
3. Labs require a pre-lab activity: a pre-lab quiz before lab, a written outline of the lab procedure, and a report. **Lab material is available in the blackboard site of ecampus.** You don’t need to purchase a separate Lab manual. Each lab should be printed out early and the student should come prepared to do the lab with the printed material. **The online pre-lab quiz for each lab is due Sunday night.** The outline is due at the beginning of the lab period. Its purpose is to ensure that you understand the experiment and all related safety procedures. **If you have not completed the prelab assignment, you may not be allowed to attend lab.**
4. Lab reports are due at the end of the lab period after completion of the experiment. Late reports will not be accepted.
5. Your lab grade will be based on following: safety procedures, your lab report and prelab, accuracy, precision, and yield.
6. **If you miss more than three labs you will receive a failing grade for the entire course.**
7. Food and drinks are not allowed in the chemistry labs due to safety precautions.

**Obtaining Final Course Grades Using eConnect**

Final Grade Reports are no longer mailed. Convenient access is available online at www.econnect.dcccd.edu. Use your identification number when you log onto eConnect, an online system developed by the DCCCD to provide you with timely information regarding your college
record. Your grades will also be printed on your **Student Advising Report**, which is available in the Admissions Office.

**Eastfield College Email Policy**
Faculty and students must have and use a DCCCD account for all correspondence relating to academic coursework. For information on setting up a DCCCD student email account go to: [http://www.dcccd.edu/netmail/home.html](http://www.dcccd.edu/netmail/home.html)

**Course Outline:**
Details of the working days as well as class work, exams, lab work and online “Mastering Chemistry” Quiz expected to be completed are shown in the schedule.

**Attendance Policy:**
Attendance in every class is among the minimum requirements for success. If you are absent from classes, you may miss the quizzes and the grades associated with it. Attendance in lab is mandatory. There are no makeup labs. **Failure to give the FINAL exam may result in an automatic “F” in this course.**

**Financial Aid Statement**
You must attend and participate in your on-campus or online course(s) in order to receive federal financial aid. Your instructor is required by law to validate your attendance in your on-campus or online course in order for you to receive financial aid. You must participate in an academic related activity pertaining to the course but not limited to the following examples: initiating contact with your instructor to ask a question about the academic subject studied in the course; submitting an academic assignment; taking an exam; completing an interactive video; participating in computer-assisted instruction; attending a study group assigned by the instructor; or participating in an online discussion board about academic matters relating to the course. **In an online course, simply logging in is not sufficient by itself to demonstrate academic attendance. You must demonstrate that you are participating in your online class and are engaged in an academically related activity such as in the examples described above. Failure to do so will prevent you from being certified and will affect your financial aid. Certification due date is July 14th.**

Students who are receiving any form of financial aid should check with the Financial Aid Office prior to withdrawing from classes. Withdrawals may affect your eligibility to receive further aid and could cause you to be in a position of repayment for the current semester. **Students who fail to attend or participate after the drop date are also subject to this policy.**

**Repeating This Course: (Third Attempt to Enroll in a Course)**
Effective for Fall Semester 2005, the Dallas County Community Colleges will charge additional tuition to students registering the third or subsequent time for a course. All third and subsequent attempts of the majority of credit and Continuing Education/Workforce Training courses will result in additional tuition to be charged. Developmental Studies and some other courses will not be charged a higher tuition rate. Third attempts include courses taken at any of the Dallas County Community Colleges since the Fall 2002 Semester. **See Third Attempt to Enroll in a Course at:** [http://www.dcccd.edu/thirdcourseattempt/](http://www.dcccd.edu/thirdcourseattempt/)

**Science Corner**
The Science Corner provides free tutoring in Biology, Chemistry, and Physics, and has information on open labs. Students are encouraged to take advantage of this service for additional help in their
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Chemistry Homepage
The Chemistry Homepage in Eastfield College Website has several useful information available that is available to students. Explore the page and take a look at the links, including useful information regarding several concepts in Chemistry. For more information please visit the link: http://eastfieldcollege.edu/smpe/Chemistry/index.asp

Academic Honesty
Scholastic dishonesty is a violation of the Code of Student Conduct. Scholastic dishonesty includes, but is not limited to, cheating on a test, plagiarism, and collusion.

As a college student, you are considered a responsible adult. Your enrollment indicates acceptance of the DCCCD Code of Student Conduct published in the DCCCD Catalog at http://www1.dcccd.edu/cat0506/ss/code.cfm

Academic dishonesty includes, but is not limited to, cheating on tests, plagiarism and collusion. Cheating includes copying from another student’s test or homework paper, using materials not authorized, collaborating with or seeking aid from another student during a test, knowingly using, buying, selling, stealing, or soliciting the contents of an unadministered test, and substituting for another person to take a test. Plagiarism is the appropriating, buying, receiving as a gift, or obtaining by any means another’s work and the unacknowledged submission or incorporation of it in one’s own written work. Collusion is the unauthorized collaboration with another person in preparing written work for fulfillment of course requirements. Academic dishonesty is a serious offense in college. You can be given a failing grade on an assignment or test, can be failed for the class, or you can even be suspended from college.

Food and Drink Policy
Food, drinks, and tobacco products are prohibited in Eastfield College classrooms.

ADA Statement
Students with a physical, mental or learning disability who require accommodations should contact the college Disability Services Office in C237. Call 972.860.8348 or email efcdso@dcccd.edu. For more information: http://www.eastfieldcollege.edu/SSI/DSO/index.html

Religious Holidays
Absences for observance of a religious holy day are excused. Notification of the absence must be given to the instructor in writing at least two weeks prior to the date of the holy day. A student whose absence is excused to observe a religious holy day is allowed to contract with the instructor to take a make-up examination or complete an assignment within a mutually agreed upon time after the absence.

Withdrawal Policy
If you are unable to complete this course, it is your responsibility to withdraw formally. The withdrawal request must be received in the Registrar's Office by August 3rd. Failure to do so will result in your receiving a performance grade, usually an “F.” If you drop a class or withdraw from the college before the official drop/withdrawal deadline, you will receive a “W” (Withdraw) in each class dropped. For more information about drop deadlines, refer to the current printed Credit Class

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Schedule, contact the Admissions/Registrar’s Office at 972-860-7167 (Room C119), or contact the division office. If you drop a class via eConnect, make sure to print a copy of the confirmation and keep the copy. In the event of a discrepancy it will be the responsibility of the student to provide documentation of having dropped the class.

**STOP BEFORE YOU DROP**

For students who enrolled in college level courses for the first time in the fall of 2007, Texas Education Code 51.907 limits the number of courses a student may drop. You may drop no more than 6 courses during your entire undergraduate career unless the drop qualifies as an exception. Your campus counseling/advising center will give you more information on the allowable exceptions.

Remember that once you have accumulated 6 non-exempt drops, you cannot drop any other courses with a “W”. Therefore, please exercise caution when dropping courses in any Texas public institution of higher learning, including all seven of the Dallas County Community Colleges. For more information, you may access: 
https://www1.dcccd.edu/coursedrops

**Family Educational Rights and Privacy Act of 1974 (FERPA)**

In compliance with the Family Educational Rights and Privacy Act of 1974 (FERPA), the College may release information classified as “directory information” to the general public without the written consent of the student. Directory information includes: (1) student name, (2) student address, (3) telephone numbers, (4) date and place of birth, (5) weight and height of members of athletic teams, (6) participation in officially recognized activities and sports, (7) dates of attendance, (8) educational institution most recently attended, and (9) other similar information, including major field of student and degrees and awards received. Students may protect their directory information at any time during the academic year. If no request is filed, directory information is released upon written inquiry. No telephone inquiries are acknowledged. No transcript or academic record is released without written consent from the student, except as specified by law.

**Classroom Etiquette**

General Chemistry Courses Chemistry 1411 and 1412 represent major steps in the growth and development of the future scientist or physician or allied health field worker. Systematic and serious learning are encouraged in these courses. Any disruption to the learning atmosphere in the class room is not allowed. Cell phones should be switched off.

**Children on Campus**

The institution strives to protect an environment most conducive to teaching and learning for all enrolled students. Children who are taking part in organized scheduled activities or who are enrolled in specific classes are welcomed. Minor children, however, should not be brought to the institution unless closely supervised by their parent. Minor children should not be brought into classrooms, laboratories or other facilities of the college. This practice is disruptive to the learning process. In the case of an emergency where the student-parent has no alternative but to bring the child to campus, classroom faculty or the administrative heads of other units have full discretion as to whether a child may be allowed to quietly stay in the location. These individuals may require that children be removed by the student-parent from the setting if, in their opinion, the presence of the child is deemed to be disruptive to the learning process. For reasons of security and child welfare the institution will not permit unattended children to be left anywhere on the premises. Parents who have problems with childcare should visit the Counseling and/or Advisement Center to receive referrals to childcare services in the area.

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INSTITUTIONAL EQUITY

The Office of Institutional Equity, in coordination with DCCCD colleges, has the primary responsibility for reviewing, updating and implementing compliance policies and procedures. The Institutional Equity and Compliance Officer and the Office of Institutional Equity will ensure compliance with College District policies, federal and state laws related to sexual assault, Title IX, Title II (Americans with Disabilities Act) and the Military Veterans Full Employment Act to support diversity and inclusion.

Students with Disabilities If you are a student with a disability and/or special needs, or if you think you may have a disability, please contact the college Disability Services Office (DSO). Please note that all communication with DSO is confidential. If you are eligible for accommodations, please provide or request that the DSO send your accommodation letter to me as soon as possible (students are encouraged to contact DSO at the beginning of the semester). For more information regarding the College Disability Services Office, please visit the Student Services website: https://www.eastfieldcollege.edu/services/Disability/Pages/default.aspx or contact DCCCD Office of Institutional Equity at (214) 378-1633.

College Disability Services Office 972-860-8348

A Note on Harassment, Discrimination and Sexual Misconduct

We are committed to assure all community members learn and work in a welcoming and inclusive environment. Title VII, Title IX and DCCCD policy prohibit harassment, discrimination and sexual misconduct. If you encounter harassment, sexual misconduct (sexual harassment, sexual assault, stalking, relationship violence, stalking), retaliation or discrimination based on race, color, religion, age, national origin, disability, sex, sexual orientation, gender identity, and/or gender expression, please contact your College Title IX Coordinator or the Office of Institutional Equity. We treat this information with the greatest degree of confidentiality possible while also ensuring student welfare and college safety.

We are concerned about the well-being and development of our students, and are available to discuss any concerns. There are both confidential and non-confidential resources and reporting options available to you. If students wish to keep the information confidential, please contact the college Counseling or Student Health Services. As required by DCCCD policy, incidents of discrimination and/or sexual misconduct shared with faculty will be reported to the College Title IX Coordinator or District Title IX Coordinator. The Title IX Coordinator will contact the student and determine if further investigation is needed. For more information about policies, resources or reporting options, please contact your college Title IX Coordinator or visit https://www.eastfieldcollege.edu/au/fastfacts/legal/TitleIX/Pages/default.aspx.

College Title IX Coordinator

Eastfield Rachel Wolf TitleIX-EFC@dcccd.edu 972-860-7325

District Title IX Coordinator

Office of Institutional Equity LaShawn Grant TitleIX-District@dcccd.edu 214-378-1633

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<table>
<thead>
<tr>
<th>#</th>
<th>Day/Date</th>
<th>Chapter</th>
<th>Topic</th>
<th>MC Quiz</th>
<th>Lab</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>T 07/11</td>
<td>0</td>
<td>Introduction, Experimentation and measurement</td>
<td>Safety, Blackboard &amp; Lab Check-In</td>
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<td>2</td>
<td>W 07/12</td>
<td>1</td>
<td>The structure and stability of Atoms</td>
<td>Quiz 0</td>
<td>Basic Laboratory Techniques and Measurement</td>
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<td>3</td>
<td>R 07/13</td>
<td>2</td>
<td>Periodicity and the Electronic Structure of Atoms</td>
<td>Quiz 1</td>
<td>Relationships of Density, Mass, and Volume</td>
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<td>4</td>
<td>F 07/14</td>
<td>2</td>
<td>Periodicity and the Electronic Structure of Atoms</td>
<td>POGIL I</td>
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<td>5</td>
<td>M 07/17</td>
<td>(Ch 0-2)</td>
<td>Review for Exam-1</td>
<td>Quiz 2</td>
<td><strong>Exam 1</strong></td>
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<tr>
<td>6</td>
<td>T 07/18</td>
<td>3</td>
<td>Atoms and Ionic bonds</td>
<td>A Beer’s Law Investigation</td>
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<td>7</td>
<td>W 07/19</td>
<td>3</td>
<td>Atoms and Ionic bonds</td>
<td>Ionic, Molecular formulas &amp; Nomenclature</td>
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<td></td>
<td>4</td>
<td>Atoms and Covalent bonds</td>
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<tr>
<td>8</td>
<td>R 07/20</td>
<td>4</td>
<td>Atoms and Covalent bonds</td>
<td>Quiz 3</td>
<td>Groups II &amp; VII</td>
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<td>9</td>
<td>M 07/24</td>
<td>5</td>
<td>Covalent Bonds and Molecular Structure</td>
<td>Quiz 4</td>
<td>POGIL 2</td>
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<td>10</td>
<td>T 07/25</td>
<td>(Ch 3-5)</td>
<td>Review for Exam-2</td>
<td>Quiz 5</td>
<td><strong>Exam 2</strong></td>
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<td>11</td>
<td>W 07/26</td>
<td>6</td>
<td>Chemical Arithmetic: Stoichiometry</td>
<td>Synthesis of Aspirin</td>
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<td>12</td>
<td>R 07/27</td>
<td>6</td>
<td>Chemical Arithmetic: Stoichiometry</td>
<td>Antacids</td>
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<td>13</td>
<td>M 07/31</td>
<td>7</td>
<td>Reactions in Aqueous Solutions</td>
<td>Quiz 6</td>
<td>Determination of Empirical Formula</td>
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<td>14</td>
<td>T 08/01</td>
<td>7</td>
<td>Reactions in Aqueous Solutions</td>
<td>Quiz 7</td>
<td>Reactions of Copper</td>
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<tr>
<td>15</td>
<td>W 08/02</td>
<td>8</td>
<td>Thermochemistry</td>
<td>Quiz 8</td>
<td>POGIL 3</td>
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<tr>
<td>16</td>
<td>R 08/03</td>
<td>(Ch 6-8)</td>
<td>Review for Exam-3</td>
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<td><strong>Exam 3</strong></td>
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<tr>
<td>17</td>
<td>M 08/07</td>
<td>9</td>
<td>Gases</td>
<td>Molar Mass of a Volatile Compound, Check-out</td>
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<td>Date</td>
<td>Quiz</td>
<td>Lecture Schedule</td>
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<tr>
<td>18 T 08/08</td>
<td>9</td>
<td>Gases</td>
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<tr>
<td>19 W 08/09</td>
<td>10</td>
<td>Liquids, Solids, and Phase Changes, Review for Final Exam</td>
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<tr>
<td>20 R 08/10</td>
<td>10</td>
<td>Final ACS Examination Ch 1 - 10</td>
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Lecture schedule may change, but will be informed in a timely manner. Lab schedules are tentative and final version of this schedule will be posted (if there is any change) on or before the first day of classes.