GENERAL CHEMISTRY I – CRN: 62074
Department of Physical and Environmental Sciences
Fall 2015

A. COURSE INFORMATION

Course number/section: 1411.006
Class meeting time: TR – 09:30-10:45
Class location: EN-104
Course Website: General Chemistry I at the University Catalogue

B. INSTRUCTOR INFORMATION

Instructor: Dr. Cesar A. Marquez
Office location: CS-206
Office hours: TR – 11:00-13:00
Telephone: (361) 825 5701
e-mail: cesar.marquez@tamucc.edu
Appointments: By email

C. COURSE DESCRIPTION

General Chemistry is the foundation course in chemistry for all science majors. This course will provide a basic understanding of chemical concepts such as periodic properties, structure, bonding, thermodynamics, and chemical kinetics. The laboratory is intended to help students acquire important knowledge and techniques of modern chemistry as well as developing lab skills.

D. PREREQUISITES AND COREQUISITES

Prerequisites
Student Laboratory Safety Training (SMTE-0091) are required for continued participation in this course.
E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES

Required Textbook(s)
CONNECT Code (comes with new textbook or can be purchased separately)

Where and How to Get It:
1. Bookstore: Your bookstore has Connect Code (The Connect code you will need to access the online study modules is included in the package.) To register you follow the same steps as below but you enter your code.
   - Online: All DIGITAL. You can purchase Connect (no print book, Ebook and access to all the Connect) directly from the course website.
   - Go the section web address provided by your Instructor
   - Click the “Register Now” Button
   - Enter your email address
   - Enter your access code, select “Buy Online”, or you can “Start Free Trial” if you don’t have an access code
   - Complete the registration form, click “Submit”

Support: If you need any Technical Support (forgotten password, wrong code, etc) please contact McGraw-Hill Education Customer Experience Group at (800) 331-5094. Please be sure to get your case number for future reference if you call the CXG line.)
FAQs: http://www.connectstudentsuccess.com/

F. STUDENT LEARNING OUTCOMES AND ASSESSMENT

The overall objective is for the student to master basic chemistry concepts such as:
   - Nomenclature
   - Balancing chemical equations
   - Periodic behavior of elements
   - Stoichiometric calculations

The secondary objectives of this course are to increase the students’ knowledge of the involvement of chemistry in everyday life, prepare the students for organic and upper level
chemistry courses, and involve the students in critical thinking exercises through course assignments.

G. INSTRUCTIONAL METHODS AND ACTIVITIES

The course implement high-impact practices (HIPs) such as ‘weekend challenges’ and ‘real life’ applications of course material, to encourage the students’ engagement with their studies both in and out of the classroom. Although the lecture’s style necessarily adapts to class size, it is in general based upon a constructivist approach where the acquisition of knowledge is conceived as a student-centered and dynamic process, rather than objective and static.

H. MAJOR COURSE REQUIREMENTS AND GRADING

The course includes lectures and laboratories. They will be graded separately, and the final course grade (100pts) will consider the following distribution:

**Lecture (75% of the final course grade):** The lectures’ component will be graded using four semester’s exams and a final exam.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Score</th>
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<tbody>
<tr>
<td>CONNECT</td>
<td>10</td>
</tr>
<tr>
<td>Middle Exams</td>
<td>(4 x 5) 20</td>
</tr>
<tr>
<td>Final Exam</td>
<td>45</td>
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<tr>
<td>Lab Assignments</td>
<td>25</td>
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Attendance is mandatory and therefore it will not be considered when grading.

**Laboratory (25% of the final course grade):** After completed all lab assignments and exam, you will be assigned a lab grade by your lab instructor. All complains and concerns about the lab grade should be directed to the lab instructor. You will receive more information about the Organic Chemistry I Laboratory Course (CHEM-1411.10x) in the lab syllabus.

I. COURSE CONTENT/SCHEDULE

<table>
<thead>
<tr>
<th>Week- Day</th>
<th>Topic</th>
<th>Reference Chapter</th>
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</thead>
<tbody>
<tr>
<td>35 - Aug 27</td>
<td>Syllabus Presentation</td>
<td></td>
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<tr>
<td>36</td>
<td>Introduction to Chemistry</td>
<td>Silberberg CH 01</td>
</tr>
<tr>
<td>37</td>
<td>Atoms, Molecules, and Ions</td>
<td>Silberberg CH 02</td>
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<tr>
<td>Week</td>
<td>Topic</td>
<td>Related Chapter</td>
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<td>38</td>
<td>Introduction to Quantum Theory</td>
<td>Silberberg CH 07</td>
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<tr>
<td>38 - Sep 17</td>
<td>Exam I</td>
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<td>39</td>
<td>Periodic Properties</td>
<td>Silberberg CH 08</td>
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<tr>
<td>40</td>
<td>Basic Concepts of Chemical Bonding</td>
<td>Silberberg CH 09</td>
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<tr>
<td>41</td>
<td>Mass Relationships and Chemical Equations</td>
<td>Silberberg CH 03</td>
</tr>
<tr>
<td>42</td>
<td>Mass Relationships and Chemical Equations</td>
<td>Silberberg CH 03</td>
</tr>
<tr>
<td>42 - Oct 15</td>
<td>Exam II</td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>Aqueous Reactions</td>
<td>Silberberg CH 04</td>
</tr>
<tr>
<td>44</td>
<td>Gases</td>
<td>Silberberg CH 05</td>
</tr>
<tr>
<td>45</td>
<td>Thermochemistry</td>
<td>Silberberg CH 06</td>
</tr>
<tr>
<td>46</td>
<td>Thermochemistry</td>
<td>Silberberg CH 06</td>
</tr>
<tr>
<td>46 - Nov 12</td>
<td>Exam III</td>
<td></td>
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<tr>
<td>47</td>
<td>Polymers: Materials Chemistry</td>
<td>Silberberg CH 10</td>
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<tr>
<td>48</td>
<td>Advanced Concepts of Chemical Bonding</td>
<td>Silberberg CH 11</td>
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<td>48 - Nov 26</td>
<td>Exam IV</td>
<td></td>
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<td>49 - TBD</td>
<td>Final Exam</td>
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Note: Changes in this course schedule may be necessary and will be announced to the class by the instructor. The assignments and exams shown are directly related to the Student Learning Outcomes described in Section F.

J. **COURSE POLICIES**

**Attendance/Tardiness**
The student is expected to be on time and attend every class. If absent, it is the responsibility of the student to obtain missed information from a classmate. Missed information includes not only lecture notes, but also any possible information regarding syllabus changes. The student is expected to arrive on time prepared to take notes, i.e., with pen, paper, and colored markers/pencils.

**Late Work and Make-up Exams**
There is no make-up exam for this class. Students with a university approved scheduled absence (athletics, military duty, etc.) MUST contact the instructor well in advance of the scheduled absence. Exams may be taken early in those specific cases. Students who do not arrange to take the exam ahead of time will not be eligible for this special consideration. A
written excuse from the university department involved or the Office of the Dean of Students is required.

**Extra Credit**
There is no extra credit in this course.

**Cell Phone & Laptop Use**
Cell phones and laptops are allowed during lectures. Before you enter the lecture hall turn OFF your cellular phone! Beepers must also be turned off or put on silent mode. Electronic interruptions absolutely will NOT be tolerated.

**Food in Class**
Food is allowed in this course.

**Missed Exam**
Students who do not arrange to take the exam ahead of time will not be eligible for this special consideration. A written excuse from the university department involved or the Office of the Dean of Students is required.

**Participation**
Students are expected to participate during the classes, this way contributing to the learning process of the group. The classes are designed as an active environment where every new concept is applied to real synthetic examples. The students are expected to participate as a team, applying critical thinking to the resolution of the different practical challenges proposed.

**K. COLLEGE AND UNIVERSITY POLICIES**

**Academic Integrity (University)**
University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in a failing grade.

**Classroom/Professional Behavior**
Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.

Statement of Civility
Texas A&M University-Corpus Christi has a diverse student population that represents the population of the state. Our goal is to provide you with a high quality educational experience that is free from repression. You are responsible for following the rules of the University, city, state and federal government. We expect that you will behave in a manner that is dignified, respectful and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation or disability. Behaviors that infringe on the rights of another individual will not be tolerated.

Deadline for Dropping a Course with a Grade of W (University)
The grade of W will be assigned to any student officially dropping a course. Please consult with the instructor before you decide to drop to be sure it is the best thing to do. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. Should dropping the course be the best course of action, visit the Office of the University Registrar for the Course Drop Form that must submitted. No student is eligible to receive a W without completing the official drop process by this deadline. Please consult the Academic Calendar (http://www.tamucc.edu/academics/calendar/) for the last day to drop a course.

Grade Appeals (College of Science and Engineering)
As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to
demonstrate the appropriateness of the appeal. A student with a complaint about a grade is
encouraged to first discuss the matter with the instructor. For complete details, including
the responsibilities of the parties involved in the process and the number of days allowed
for completing the steps in the process, see University Procedure 13.02.99.C2.01, Student
Grade Appeal Procedures. These documents are accessible through the University Rules
website at http://www.tamucc.edu/provost/university_rules/index.html, and the College of
Science and Engineering Grade Appeals webpage at http://sci.tamucc.edu/students/GradeAppeal.html. For assistance and/or guidance in the
grade appeal process, students may contact the chair or director of the appropriate
department or school, the Office of the College of Science and Engineering Dean, or the
Office of the Provost.

Disability Services
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that
provides comprehensive civil rights protection for persons with disabilities. Among other
things, this legislation requires that all students with disabilities be guaranteed a learning
environment that provides for reasonable accommodation of their disabilities. If you believe
you have a disability requiring an accommodation, please call (361) 825-5816 or visit
Disability Services in Corpus Christi Hall 116.

If you are a returning veteran and are experiencing cognitive and/or physical access issues
in the classroom or on campus, please contact the Disability Services office for assistance at
(361) 825-5816.

http://disabilityservices.tamucc.edu/

Statement of Academic Continuity
In the event of an unforeseen adverse event, such as a major hurricane and classes could
not be held on the campus of Texas A&M University–Corpus Christi; this course would
continue through the use of Blackboard and/or email. In addition, the syllabus and class
activities may be modified to allow continuation of the course. Ideally, University facilities
(i.e., emails, web sites, and Blackboard) will be operational within two days of the closing of
the physical campus. However, students need to make certain that the course instructor has
a primary and a secondary means of contacting each student.

L. OTHER INFORMATION
**Academic Advising**

The College of Science & Engineering requires that students meet with an Academic Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair. Meetings are by appointment only; advisors do not take walk-ins. Please call or stop by the Advising Center to check availability and schedule an appointment. The College’s Academic Advising Center is located in Center for Instruction 350 or can be reached at (361) 825-3928.

**M. GENERAL DISCLAIMER**

I reserve the right to modify the information, schedule, assignments, deadlines, and course policies in this syllabus if and when necessary. I will announce such changes in a timely manner during regularly scheduled lecture periods.