General Chemistry 1 - CHEM 1411 (Learning Community)
Department of Physical & Environmental Sciences
Fall 2020

A. COURSE INFORMATION

Course number/section: CHEM-1411.071 (Learning Community Group 21EN)
Class meeting time: TR 09:30-10:45AM + asynchronous online
Class location: BH-104
Course Website: https://bb9.tamucc.edu/

B. INSTRUCTOR INFORMATION

Instructor: Nicolas Holubowitch, PhD
Office location: CS-242 (Center for Science), Lab: CS-235
Office hours: TBA (see Blackboard) and by appointment (online or in-person)
Telephone: 361-825-2987
e-mail: nicolas.holubowitch@tamucc.edu
Appointments: Email or call to schedule

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 nomenclature, periodic properties, structure, bonding, and stoichiometric relationships.

Extended Course Description
The overall objective is for the student to understand chemical formulas, structures. The secondary objectives of this course are to prepare the students for the second semester of General Chemistry and for Organic Chemistry, and involve the students in critical thinking exercises through course assignments.

D. PREREQUISITES AND COREQUISITES

Co-requisites: Student Laboratory Safety Training (SMTE-0093)

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES

Required Textbook
Chemistry: The Molecular Nature of Matter and Change, 9th Edition, Silberberg and Armateis, McGraw-Hill (with the ALEKS Access Code). Note: the university bookstore packages include a Connect access code. This Connect code is unnecessary for the course, but is free with the bookstore package. Do not purchase a separate Connect access code.
Online Homework Access Code: You must have the ALEKS access code that accompany the text to enroll in the online
homework. You can also buy the e-version of the text and the code online. All students are required to start ALEKS the first week of class. Failure to obtain access may result in a negative impact on your grade. Specific due dates for each assignment can be found online within the ALEKS program. Access codes bought for this course previously may be reused provided it has not expired. Students are responsible for determining the expiration date and purchasing a new code, if necessary.

**Link for online homework:**
ALEKS: [https://www.aleks.com/](https://www.aleks.com/)  Course code: TBA
Instructions on how to set up the account or switch an existing account to this course can be found on Blackboard.

**Online technical support**
TAMUCC accounts (Email, Blackboard, etc.): ithelp@tamucc.edu
ALEKS: [http://support.aleks.com/](http://support.aleks.com/)

**Supplies**
Calculator and Periodic Table.

### F. STUDENT LEARNING OUTCOMES AND ASSESSMENT
Assessment is a process used by instructors to help improve learning. Assessment is essential for effective learning because it provides feedback to both students and instructors. A critical step in this process is making clear the course’s student learning outcomes that describe what students are expected to learn to be successful in the course. The student learning outcomes for this course are listed below. By collecting data and sharing it with students on how well they are accomplishing these learning outcomes students can more efficiently and effectively focus their learning efforts. This information can also help instructors identify challenging areas for students and adjust their teaching approach to facilitate learning.

By the end of this course, students should be able to understand:
- Atomic structure and quantum theory
- Periodic Table, properties and trends
- States and properties of matter
- Theories of bonding
- Electron configuration
- Moles and stoichiometry
- Redox reactions
- Acids, bases, and water solutions
- Units of measure, significant figures, and rounding
• Thermochemistry
• Gases and the Ideal Gas Law
• Orbital hybridization

G. INSTRUCTIONAL METHODS AND ACTIVITIES

Lecture presentations, assignments, reading materials, and other course-related information will be posted on Blackboard. Lectures will be followed by a review of chapters, problem solving, and student interaction.

H. MAJOR COURSE REQUIREMENTS AND GRADING

Final grade will be calculated as follows:

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam I</td>
<td>100</td>
</tr>
<tr>
<td>Exam II</td>
<td>100</td>
</tr>
<tr>
<td>Exam III</td>
<td>100</td>
</tr>
<tr>
<td>Final Exam</td>
<td>100</td>
</tr>
<tr>
<td>Online Homework/attendance</td>
<td>200</td>
</tr>
<tr>
<td>Laboratory</td>
<td>200</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>800</strong></td>
</tr>
</tbody>
</table>

The lowest exam grade will be dropped.

Final letter grading for the course will be: A > 90%, B > 80%, C > 70%, D > 60%, F < 60%.

Exams:

Exams will typically be open questions or multiple choice. No communication between students is allowed. No communication devices are allowed. The final exam will be comprehensive.

The answers to exam questions must follow a self-explanatory logic. The reading must be clear. All calculations must be presented in detail for at least partial credit and absolutely with the proper units. Most of the questions of the exams will consist in problems similar to those seen in class or lab sessions.

Students must be seated no later than 5 min before the start of the exam. There should be as much distance between each student as the classroom configuration allows and the desk must be empty with the exception of specifically authorized items.

Students are not allowed in the classroom after the start of the exam without the permission of the
instructor. In any case no student will be admitted after the first exam-taker has left. Students leaving the room will not be allowed to return unless authorized by the instructor. All material including intermediate calculations will be turned to the instructor at the end of the exam.

There are no make-up exams. All excuses must be requested in advance with the obvious exception of emergencies. Students with a university approved scheduled absence (athletics, military duty, etc.) should contact the instructor well in advance of the scheduled absence to request an exception. Exams may be taken early in those specific cases. Students who do not arrange to take exams 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 may be requested.

Homework and quizzes:

Homework assignments can be given. Quizzes will periodically be given in labs and can be given during lectures.

I. COURSE CONTENT/SCHEDULE

Tentative Schedule:

<table>
<thead>
<tr>
<th>WEEK OF</th>
<th>CHAPTER</th>
<th>EXAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/17</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>8/24</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>8/31</td>
<td>3</td>
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<tr>
<td>9/7</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>9/14</td>
<td>Review</td>
<td>Exam 1</td>
</tr>
<tr>
<td>9/21</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>9/28</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>10/5</td>
<td>7, review</td>
<td></td>
</tr>
<tr>
<td>10/12</td>
<td>Review, 8</td>
<td>Exam 2</td>
</tr>
<tr>
<td>10/19</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>10/26</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>11/2</td>
<td>9, review</td>
<td></td>
</tr>
<tr>
<td>11/9</td>
<td>Review, 10</td>
<td>Exam 3</td>
</tr>
<tr>
<td>11/16</td>
<td>10</td>
<td></td>
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<tr>
<td>11/23</td>
<td>10-11</td>
<td></td>
</tr>
<tr>
<td>11/30</td>
<td>11, review</td>
<td></td>
</tr>
<tr>
<td>Finals week</td>
<td>See sched.</td>
<td>Final</td>
</tr>
</tbody>
</table>
Note: I have allocated approximately 2.5 hours of lecture time for each of the chapters covered. Some chapters may take more or less than the allocated time. 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

COVID-19
Face Coverings
Face coverings (cloth face covering, surgical mask, etc.) must be properly worn in all non-private spaces including classrooms, teaching laboratories, common spaces such as lobbies and hallways, public study spaces, libraries, academic resource, and support offices, and outdoor spaces where 6 feet of physical distancing is difficult to reliably maintain.

Attendance/Tardiness
Attendance on your scheduled days is mandatory (see Blackboard announcements for day assignments) and part of your online homework grade. When not in class, the student is expected to watch all video lectures and take notes. The student is also required to check updates about the course in Blackboard announcements, which will also be sent as emails. There is a lab component for this course. Please see the syllabus pertinent to your lab section on the Black Board. Please inform Dr. Narayana ahead of time if you have a university-approved excuse, if possible, alternate arrangements can be made for make-up exams. Student will not be allowed to take the exam if he/she arrives after the first test taker has left the examination hall.

Make-up Exams
There will be no make-up exams or quizzes for this class. If you miss one lecture exam, your final exam grade will be counted twice to replace the missed exam. This applies to ONE exam only. If you miss more than one, you will receive a zero for the additional missed exam(s). For those students who do not miss an exam, your final exam grade will be counted twice to replace your lowest exam grade (assuming that this improves your overall grade). Do not show up late to an exam, no student will be admitted to the exam after the first exam-taker has left.

Extra Credit
None unless specified in class.

Cell Phone Use
Before you enter the lecture hall turn OFF your cell phone! Beepers must also be turned
off or put on silent mode. **Electronic interruptions will NOT be tolerated! Cell phones must be put away and stored out of sight during all quizzes and exams or you will receive a zero!!**

**Laptop Use**
You are welcome to use a laptop to take notes during class. Do not use it to check email, facebook, youtube videos, etc. These other uses are considered a distraction and you will be asked to leave.

**Food in Class**
Minimally distracting drinks and snacks are allowed. Do not bring in a meal – this is not a cafeteria.

**Participation**
You are expected to be attentive and participate in asking/answering questions and in group projects, if assigned.

**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)**

I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. **Please consult with your academic advisor, the Financial Aid Office, and me, before you decide to drop this course.** Should dropping the course be the best course of action, you must initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. Please consult the Academic Calendar ([http://www.tamucc.edu/academics/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.C0.03, 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 required 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.C0.03, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at [http://academicaffairs.tamucc.edu/rules_procedures/assets/13.02.99.c0.03_student_grade_appeals.pdf](http://academicaffairs.tamucc.edu/rules_procedures/assets/13.02.99.c0.03_student_grade_appeals.pdf). 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/](http://disabilityservices.tamucc.edu/)
• **Civil Rights Complaints**
Texas A&M University-Corpus Christi is committed to fostering a culture of caring and respect that is free from discrimination, relationship violence and sexual misconduct, and ensuring that all affected students have access to services. For information on reporting Civil Rights complaints, options and support resources (including pregnancy support accommodations) or university policies and procedures, please contact the University Title IX Coordinator, Sam Ramirez (Samuel.ramirez@tamucc.edu) or Deputy Title IX Coordinator, Rosie Ruiz (Rosie.Ruiz@tamucc.edu) x5826, or visit website at Title IX/Sexual Assault/Pregnancy.

**Limits to Confidentiality.** Essays, journals, and other materials submitted for this class are generally considered confidential pursuant to the University's student record policies. However, students should be aware that University employees, including instructors, are not able to maintain confidentiality when it conflicts with their responsibility to report alleged or suspected civil rights discrimination that is observed by or made known to an employee in the course and scope of their employment. As the instructor, I must report allegations of civil rights discrimination, including sexual assault, relationship violence, stalking, or sexual harassment to the Title IX Coordinator if you share it with me.

These reports will trigger contact with you from the Civil Rights/Title IX Compliance office who will inform you of your options and resources regarding the incident that you have shared. If you would like to talk about these incidents in a confidential setting, you are encouraged to make an appointment with counselors in the University Counseling Center.

• **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**

• **Tutoring and Test Taking Strategies**
To be successful in this course, and most others, you must develop good note-taking skills, organization skills, study habits, and test-taking strategies from the very beginning. Your instructor, seminar leaders and TA’s are always available for help, but don’t wait until it’s too late! It is important that you are aware that the Center for Academic Student Achievement in Room 216 of the library provides free tutoring, test-taking strategies, and extra help. **Take advantage of this service!** Should you have test anxiety, stress problems, or need help with study skills, the University Counseling Center (Driftwood 107: 825-2703) also provides a free service.

- **Use of Electronic Devices During Exams**
  Any use of an electronic device (palm pilot, Cell Phone, MP3 player, CD player, computer …) during an exam is strictly prohibited. Any use of such a device will be considered an attempt to cheat on the exam and will result in a 0 on the exam although more severe actions may be considered. Calculators may be allowed on exams when needed, but only for mathematical operations. The use of programmable calculators to store or retrieve information during an exam will be considered an attempt to cheat on the exam. Also, if a calculator is discovered to have saved programs or information that could be used as an unfair advantage on the exam, this will be considered an attempt to cheat on the exam. Programs or operators that aid in mathematical operations such as a quadratic equation calculator may be used.

- **Assigned Homework**
  The homework assignment for this class contains the minimum suggested amount of problems that you should work during the semester. The more problems you work, the more comfortable you will be with the subject….**DO NOT GET BEHIND.**

- **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.

**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.