CHEM101: Chemistry! Better Things for Better Living
Fall 2018
Roddy 149, TR 10:50 am-12:05 pm

Instructor: Melissa A. Mullen Davis, Ph.D.
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Office Hours: Tues 2-4 pm, Wed 10-12 am, Thurs 9-10 am, or by appointment.
Course website: https://millersville.desire2learn.com

Credit: 3 class hours per week. No credit towards Chemistry major.

Required Materials:
1. iClicker2 (see p3 for more information about the iClickers)
2. Scientific, non-graphing calculator

Optional Materials:

Note: A physical version of the textbook is available on reserve at the library for 4 hour use. An e-book version is also available on reserve through the library. Please see me if you have any trouble accessing course materials.

Course Overview:
This course serves as an introduction to Chemistry and its relationship to the modern world! Some of the goals of this course are to enable you to converse using appropriate chemical terminology and to identify chemistry in the world around you. We will cover a number of topics that will use chemistry to explain observations and phenomena associated with biology, personal care products, and current topics in the news.

Course Objectives:
The goals of this course are to enable you to:
- Identify and interpret chemical terminology.
- Describe how different elements behave and how atoms combine and rearrange to form compounds.
- Describe chemical reactions relevant to modern society and predict the products of common chemical reactions.
- Describe how selected chemicals and reactions are significant to the world around you.
- Think critically about information presented in the media about chemistry.
- Nurture an appreciation (or enthusiasm!) for thinking, speaking, and acting like a scientist.

Course Organization:
We will address the goals of the course by exploring a series of topics organized into modules. Within each module, topics will be organized to address an overarching question or problem. Examples of some of our modules are shown below. Please see D2L and course module schedules for up-to-date information about readings and assessments.

Module topics include:
- Why does the UN impose sanctions on uranium enrichment?
- Why can’t we use ocean water for drinking water?
- How do cleaning products work?
How do fireworks get their pretty colors?
Why doesn’t a Tesla need gasoline?
How does sunscreen work?

**Succeeding in Chemistry Class!**
To do well in this class, it is important to:
1) Be present and prepared for class.
2) Participate and be an active learner. I promise to provide you with the resources you need to help you succeed – class materials, examples, readings, practice problems, office hours, etc – but you are ultimately responsible for the knowledge you are gaining.
3) Review your notes after each class.
4) Complete practice problems.
5) Seek help from available resources. This includes studying with friends, other chemistry students, or the tutoring center. You should also come see me if you have questions! I am available during my office hours or by appointment. If you visit with me during office hours, please bring a list of questions that you have with you to make our time together more beneficial and efficient!
6) Remain engaged and upbeat throughout the semester.

**Evaluation of Learning:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Mid-Term Exams</td>
<td>(40%)</td>
</tr>
<tr>
<td>Final Exam</td>
<td>(20%)</td>
</tr>
<tr>
<td>Quizzes</td>
<td>(15%)</td>
</tr>
<tr>
<td>In-Class Participation</td>
<td>(15%)</td>
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<tr>
<td>D2L Homework</td>
<td>(10%)</td>
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<tr>
<td>Total</td>
<td>(100%)</td>
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</tbody>
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Final letter grades will be assigned on a standard plus/minus scale:
- A: 90-100% (A+: 93-100; A-: 90-93)
- B: 80-90% (B+: 87-90; B: 83-87; B-: 80-83)
- C: 70-80% (C+: 77-80; C: 73-77; C-: 70-73)
- D: 60-70%
- F: less than 60%

**Exams, 60%**
Four mid-sememester examinations and one final exam will be administered in class on the dates indicated below. These will be opportunities for you to demonstrate your individual understanding and ability to apply, analyze and synthesize the material discussed in the course and in assigned readings.
Exams are scheduled for:
- Thurs, 9/13
- Thurs, 10/4
- Thurs, 11/1
- Thurs, 11/29
The Comprehensive Final Exam is scheduled for: Tues, 12/11, 8-10 am

**Quizzes, 15%**
There will be approximately 7 quizzes throughout the semester that cover material from the previous classes. These will be used to test your understanding of course material, help focus your studies, and assist in preparation for exams. Quizzes will be administered on D2L and must be taken within the 24 hour window provided. Quizzes can only be attempted once and should not be completed with assistance from your text, notes, or any other student. Using any assistance is a violation of the University Honor Code and is subject to disciplinary action. There are no make-up quizzes available, even if your absence for a class that day is approved. Instead, your lowest quiz score will be dropped automatically.
**In-Class Participation, 15%**
Class attendance is required! You are expected to take responsibility for learning course material and participating in class. The best way to learn the material is to attend class, work with fellow students, and engage in the material! To facilitate attendance and engagement, we will use iClickers every class so please be sure to bring your iClicker every day! Your answers will count towards the participation component in the course (note that specific answers will not be graded for being correct, only for participating). We will also use in-class group activities with some hand-written components that will count towards in-class participation. *In order to earn a grade of B or higher, you must earn at least 80% for in-class participation.* See below for more information about iClickers.

**D2L Homework (10%)**
There will be D2L homeworks throughout the semester to help you gain mastery in material discussed in class. Occasionally, a D2L homework will include material we will cover in an upcoming class. D2L homeworks may be repeated until mastery of material is gained.

**iClickers**
As mentioned above (p2) under “In-Class Participation,” we will be using iClickers in class this semester. The iClicker system helps me to understand what you know and gives everyone a chance to participate in class. I will use iClicker to keep track of attendance and participation. You should purchase iClicker 2 and must register your iClicker with D2L by the add/drop deadline, 9/4 or you will not receive credit. For a guide on student remote registration, click [here](#). You must register your iClicker within [D2L](#)! If you register with iclicker.com I will not be able to match your responses with your name and you will not receive credit. I consider bringing a fellow student’s iClicker to class to be cheating and a violation of the University Honor Code and the Academic Honesty Policy. If you are caught with a remote other than your own or have clicks in a class you did not attend, you will forfeit all participation points and may face additional disciplinary action.

**Make-Up Exam/Quiz Policy**
If you know ahead of time that you will miss an exam because of a College-sanctioned activity (e.g. an intercollegiate athletic event), you must tell me, in person, at least one full week before the exam date. You will be expected to take the quiz or exam before the scheduled exam period unless illness or a family emergency causes a late make-up exam to be necessary. The make-up exam will not necessarily be the same as the exam administered to the rest of the class. Any request for a make-up exam may require documentation. Missing a quiz or an exam without prior permission will result in a score of zero and cannot be made up.

**Use of Electronic Equipment**
Studies show that learning in a classroom environment is enhanced in a personal screen-free environment. Therefore, the use of cell phones, laptops, tablets, etc. is prohibited in class unless otherwise approved by me in advance. Distractibility is real and puppy videos are adorable.

**Learning Accommodations**
Any student who meets the eligibility requirements to receive academic accommodations through learning services should speak with the Office of Learning Services in Lyle Hall as early in the semester as possible. You should give me a Testing Accommodation Request form (“green sheet”) as soon as possible and plan to take quiz/exams on the same day and time at the Office of Learning Services. For more information: [http://www.millersville.edu/learningservices](http://www.millersville.edu/learningservices).
**Official Attendance Policy**

1. Students are expected to attend all classes. It is the student's responsibility to complete all course requirements even if a class is missed. If a student misses class for an officially excused reason, then the student is entitled to make up the missed work but only at the convenience of the faculty member. Responsibility for materials presented in, assignments made for, and tests/quizzes given in regularly scheduled classes lies solely with the student.

2. The Millersville University policy states that faculty will excuse absence for the following reasons:
   a. personal illness
   b. death or critical illness in the family
   c. participation in a university-sponsored activity
   d. jury duty
   e. military duties
   f. religious holidays

3. Faculty judge the validity of student absences from class within the University's approved guidelines and may require documentation for excuse absences. Faculty will evaluate any reason, other than those listed above, for a student missing class and determine whether the absence is justified. In these circumstances, a student may make up missed work at the discretion of the instructor.

4. In the case of foreseeable absences, students are encouraged to notify the faculty member in advance. A student who will miss class due to participation in an official University activity must notify the instructor well in advance of the activity to assure that the absence is excused.

5. For more information: [http://www.millersville.edu/registrar/faculty/attendance_policy.php](http://www.millersville.edu/registrar/faculty/attendance_policy.php)

**Academic Honesty Policy**

According to Millersville University's Academic Honesty Policy: “Students of the University are expected to be honest and forthright in their academic endeavors.” If you break the academic honesty policy, there are severe penalties. A failing grade will be assigned and you may be prosecuted by an Academic Review board. Actions that violate the Academic Honesty Policy are:

1. Plagiarism: inclusion of someone else’s words, ideas, or data as one’s own work.
2. Fabrication: falsification of research or other findings.
3. Cheating: the act or attempted act of deception by which an individual tries to misrepresent that the individual has mastered subject matter in an academic project or the attempt to gain an advantage by the use of illegal or illegitimate means. Submitting in-class participation cards for another student is considered cheating.
4. Academic Misconduct: violation of University policies by tampering with grades or participating in the distribution of any part of a test before its administration.

**Title IX Statement**

*Millersville University and its faculty are committed to assuring a safe and productive educational environment for all students. In order to meet this commitment, comply with Title IX of the Education Amendments of 1972, 20 U.S.C. §1681, et seq., and act in accordance with guidance from the Office for Civil Rights, the University requires faculty members to report to the University's Title IX Coordinator incidents of sexual violence shared by students. The only exceptions to the faculty member’s reporting obligation are when incidents of sexual violence are communicated by a student during a classroom discussion, in a writing assignment for a class, or as part of a University-approved research project. Faculty members are obligated to report to the person designated in the University Protection of Minors policy incidents of sexual violence or any abuse of a student who was, or is, a child (a person under 18 years of age) when the abuse allegedly occurred. Information regarding the reporting of sexual violence and the resources that are available to victims of sexual violence is available at [www.millersville.edu/titleix](http://www.millersville.edu/titleix).*
Counseling Reminder
Students sometimes face mental health or drug/alcohol challenges in their academic careers that interfere with their academic performance and goals. Millersville University is a caring community and resources are available to assist students who are dealing with problems. The Counseling Center (717-871-7821) is an important resource for both mental health and substance abuse issues. Additional resources include: Health Services (717-871-5250), Center for Health Education and Promotion (717-871-4141), Campus Ministries, and Learning Services (717-871-5554).

Americans with Disabilities Act
Millersville University is committed to equality of opportunity and freedom from discrimination for all students, employees, applicants for admission or employment, and all participants in public University-sponsored activities. In keeping with this commitment, and in accordance with the Americans with Disabilities Act (ADA) the University will make every effort to provide equality of opportunity and freedom from discrimination for all members of the University community and visitors to the University, regardless of any disability an individual may have. Accordingly, the University has taken positive steps to make University facilities accessible to individuals with disabilities and has established procedures to provide reasonable accommodations to allow individuals with disabilities to participate in University programs. The University administration and management are obligated to report any allegation of discrimination to the appropriate office as defined in this policy.

Please let me know how I may make accommodations in the classroom setting that will enhance and support your learning.