

Principles of Chemistry II (CHEM 102)

Welcome to Chemistry!

Course Description:

Chemistry 102 is the second half of an introductory two-semester course primarily designed for those students who plan to continue their chemical education beyond the elementary level. We will find, however, that Chemistry 102 is a valuable experience not only for aspiring chemists, chemical engineers, medical doctors, dentists, pharmacists, and so forth, but for thoughtful students of all disciplines. You will also discover that chemistry is truly a central science.

Required Materials:

Text: *Chemistry: Atoms First, 2nd edition*; Burdge/Overby; McGraw-Hill

The Chemistry Department has voted to require students enrolled in CHEM 101 and CHEM 102 to use either the TI-30XIIS or the TI-30XA calculator. Absolutely no exceptions will be permitted during an exam. It is your responsibility to use the correct calculator. Attempts to use an “illegal” calculator can result in temporary confiscation and you will have to take the exam without a calculator.

Instructors:

Dr. Wendy Olson

Office: Meyerhoff 432; 410-455-5782

Office Hours: by appointment

Email: wolson001@umbc.edu

Dr. Tara Carpenter

Office: Meyerhoff 112; 410-455-3085

Email: carpent@umbc.edu

What do I do if I need help?

If you have a question about chemistry, what will be on an exam, what equations you need to know, etc. you should post them on the appropriate discussion board on Blackboard. The discussion boards will be monitored by Drs. Olson and Carpenter. All content related questions submitted by email will not be answered. If you have a personal problem or will be absent, you should contact Dr. Olson directly through email. When you email, make sure you include a **subject line** that includes **your name and the class**. An example is “CHEM 101, Section 01, John Doe”. **Be detailed** in your email. If you have a question about grading, **please include your Student ID**. If you wish to make an appointment, **suggest 3 or 4 possible meeting times**, and I will get back to you.

Meeting Times:	102-1 (1037)	T/Th	at	9:00 – 12:10	MEYR 030	Lecture
	102-2 (1038)	T/Th	at	1:00 – 2:50	UC 201	Discovery
	102-3 (1093)	T/Th	at	3:00 – 4:50	UC 201	Discovery

Discovery begins Tuesday, July 7.

According to UMBC regulations, CHEM 101 may not be repeated if CHEM 102 is taken for a grade. Since CHEM 102 is a prerequisite for CHEM 351, it cannot be repeated if CHEM 351 has already been taken for a grade. CHEM 101 with a grade of 'C' or better is a prerequisite for Chemistry 102. If you do not meet one or more of the above requirements, it is highly recommended that you drop this course. Transcripts will be checked and violators will receive a grade of "F". This is your warning.

In addition, CHEM 102 is a co-requisite of CHEM 102L (the laboratory course). Hence, if you drop Chemistry 102, you must also drop CHEM 102L. Failure to do so will result in a grade of "F" for CHEM 102L.

Blackboard:

Blackboard will be used in this course. There you can find the syllabus, helpful handouts, lecture note outlines, exam answer keys, grades, Discovery answer keys, discussion boards and more. It is your responsibility to check Blackboard DAILY for announcements, changes to schedule, etc.

Grading:

Your final grade is dependent on a midterm exam, a final exam, online homework (ALEKS), in-class clicker questions, and Discovery. The breakdown is as follows:

Exam 1:	25%
Exam 2:	25%
Discovery:	20%
ALEKS:	20%
Clickers:	10%

Grade %	Final Letter Grade
90 – 100%	A
80 – 89%	B
70 – 79%	C
60 – 69%	D
< 60%	F

Lecture:

The overall direction and instructional format of the lectures will be conducted by Dr. Olson. It is highly recommended that you come to class so that you take full advantage of the resources available to you. You are responsible for all material and announcements presented in lecture, which will begin promptly at 9:00 AM. About halfway through lecture, you will have a short break (10-15 min), after which lecture will resume until 12:10 PM

Prior to each lecture, you should read the corresponding section in the textbook as outlined on page 5. Some material will be covered only lightly in order to devote more time to problem solving and concept application in class. Class time will be most lucrative for you if you read the book ahead of time, and work some of the problems.

Clickers (10%):

You will be asked to respond to several questions during each class. You must have a Turning Technologies (TT) clicker to respond. Throughout the class period, questions will be asked that are designed for student learning and engagement and will build upon the material in the reading. Correct answers are worth 2 points and incorrect answers are worth 1 point. Discussion is encouraged during these questions.

At the end of the semester, each student's clicker grade will be determined with reference to 95% of the total possible clicker points, with no student earning more than 100%. For example, if there are 100 possible clicker points:

	Clicker Points earned	Clicker calculation	Clicker grade (%)
Student A	100	$100/95 \times 100$	105 → 100
Student B	90	$90/95 \times 100$	95
Student C	80	$80/95 \times 100$	84
Student D	70	$70/95 \times 100$	74
Student F	60	$60/95 \times 100$	63
etc	etc	etc	etc

Determining each student's clicker grade based on only 95% of the total possible points represents a built-in safe guard against practical issues with your clicker and absences. This counts towards all absences, forgotten clickers, attending a section that you are not registered for **AND** clicker malfunctions. It is your responsibility to confirm that your points are recorded to Blackboard after every class. If you think your clicker isn't working, contact Turning Technologies immediately!

<http://www.turningtechnologies.com/studentresponsesystems/studentresources/studentlounge/responsecardrf/>

It is academic misconduct to bring someone else's clicker to class and/or to have someone bring your clicker to class. If you are found in possession of someone else's clicker or if it is found that someone brought your clicker to class, you will be reported to the UMBC Academic Misconduct Committee and you will receive an F in the course. Don't risk your grade!

You can purchase your TT clicker at the UMBC bookstore. If you are required to have a clicker in another class, you only need ONE clicker for all your classes. You must register your TT clicker through the course blackboard site. Students only need to register their clicker in blackboard one time no matter how many courses they are using it in. *The serial # is the 6 digit alpha-numeric code below the bar code. The code may include only 0-9 and A-F (not the letter "O" or the letter "I").* There is no additional registration fee.

I strongly recommend writing your name on your clicker so that if you lose it, it can be returned to you. If you lose your clicker, you will have to purchase a new one or forfeit the opportunity for points in the class. If you get a new clicker during the course of the semester, register it as you did the first one and all points will be held and continued. You do not need to notify the instructor upon registering a new clicker.

Discovery (20%):

Dr. Diana S. Hamilton; hamilton@umbc.edu; Office: MEYR 366; 410-455-3461; Office hours: by appt

Discovery sessions will be overseen by Dr. Hamilton and experienced teaching assistants. Discovery sessions will be used to guide you through the main concepts in this course. Discovery will begin on Tuesday, July 7 (the first day of class). Discovery will be worth 20% of your grade in the course. **Attendance is mandatory.** Failure to attend will result in the loss of all points for that class. Up to two absences will be excused for *University recognized documented* reasons. Unexcused absences will be penalized as outlined. See Blackboard for more information about Discovery.

# Discovery Classes Missed	Total % points deducted from FINAL CLASS AVERAGE
1	2
2	4
3	8
4	16
5	32
>5	64

ALEKS (20%):

Assignments will be completed before class using the ALEKS homework system. 10% of your grade will be based on the on-time completion of learning objectives throughout the semester. There is an assignment due every day at 9:00 AM except on Sundays and exam days. 10% of your grade will be based on complete mastery of concepts by July 2 at 9:00 AM. Please refer to the handouts on Blackboard for more information about ALEKS including how to register.

NOTE: ALEKS is not a replacement for completing end of chapter problems on your own. It is important that you do not spend all of your time doing calculation type Review Problems while overlooking the Review Questions that are more conceptual. This will lead to lower than expected (and desired) exam scores. It is recommended that you complete at least half of the Review Questions and all of the Additional Problems to maximize your success.

Exams (50%):

There will be two exams during the summer session. The date and chapter coverage of each is outlined on page 5. The exams will be multiple choice and a scantron form will be provided for you. Examination grades and answer keys will be posted on Blackboard for Exam 1. Please check that the computer score posted on Blackboard agrees with the score you have evaluated with your examination booklet and the key. It is absolutely necessary (and your responsibility) to make sure the computer generated score is correct and not the product of your exam miscoding errors. Miscoding a scantron may result in a point deduction from your score. The final exam is a standardized exam produced by the American Chemical Society and covers both CHEM 101 and CHEM 102.

Exams will be closed book. No credit will be given for ambiguous answers. It is your responsibility to bring a pencil and *approved* calculator to the exam. No cell phones are permitted at your seat. If a cell phone is seen, the intent of cheating will be assumed and at minimum you will receive a zero on the exam. If your cell phone rings in your backpack or jacket, you will lose points. Photo ID's will be checked when you turn in your exam.

There are no make-up exams. Make sure your plans to leave campus are not scheduled for exam days.

A note about cell phones:

The use of cell phones (and other electronic devices not directly related to your learning) during class is a nuisance and a disruption; not only to yourself, but to those around you. Please **turn off** your cell phone **during lecture**. Use of cell phones (even for texting) during a lecture may result in your dismissal from class. If you are caught with a cell phone or other electronic device (except your scientific calculator) **during an exam**, the intent of cheating is assumed, and you will – at the very least – **receive a zero for that exam**. If there is an extenuating circumstance that requires you to have your cell phone on during lecture, speak to Dr. Olson prior to class.

Academic Dishonesty:

According to the University rules, intent of cheating does not have to be proven. Rather, the mere act of cheating is grounds for punishment. Acts of cheating include – but are not limited to – copying someone else's homework; copying off of someone during an exam; using cheat sheets during an exam; using your cell phone during an exam; plagiarizing someone else's work and turning it in as your own; copying sentences directly out of the text or from the internet and turning it in as your own; and using an assignment from another class. I am very strict about

cheating. Working together to study is fine – and encouraged. But I DO NOT tolerate any form of cheating. I will not hesitate to write you up, which could be cause for your dismissal from the University, particularly if you have had a prior offense. To read the full Student Academic Conduct Policy, consult the UMBC Student Handbook, the Faculty Handbook, or the UMBC Policies section of the UMBC Directory, or go to www.umbc.edu/provost/integrity.

A list of important dates for the semester can be found at:

<http://www.umbc.edu/summer/importantdates.html>

Probable Schedule (subject to change):

Day	Date	Chapter covered
Tuesday	July 7	Chapter 12
Thursday	July 9	Chapter 13.1 – 13.6
Tuesday	July 14	More 13.5 – 13.6 calculations and Chapter 14
Thursday	July 16	Chapter 15.1 – 15.5
Tuesday	July 21	Chapter 15.5 – 15.6 and 16.1 – 16.5
Thursday	July 23	Chapter 16.6 – 16.12
Tuesday	July 28	Exam 1 (12 - 16)
Thursday	July 30	Chapter 17.1 – 17.3
Tuesday	Aug 4	Chapter 17.4 – 17.6
Thursday	Aug 6	Chapter 18 and 19.1 – 19.3
Tuesday	Aug 11	Chapter 19.4 – 19.8 and 20
Thursday	Aug 13	ACS Final Exam