



Semester: Spring 2019	Instructor: Dr. Tim Howes
Class Info: CHEM 106	Office Location: Jepson 202
Location/Room: Jepson 219 and Jepson 109 (lab)	Office Hours: 2:00pm - 3:00pm: Tuesdays & Thursdays * All of these office hours are subject to various meetings/appointments. Please contact me if you would like a specific meeting time. Furthermore, if these times do not work for you, contact me and we can schedule a different time.
Class Name: Chemistry and Society	
Class Days/Times: T & Th 3:30pm – 4:45pm Th 5:00pm – 7:15pm (lab)	
Class Credits: 4	Instructor E-mail: thowes@umw.edu

Land acknowledgement:

Germanna Community College is located on unceded Powhatan and Monacan land. The first indigenous people killed by white settlers were Powhatan, while the Monacan Nation was not federally recognized by the until January 2018.

Course Description

CHEM 106 is a class discussing societal problems and issues involving an understanding of important chemical principles with emphasis on relevant applications and the enhancement of chemical literacy for the non-scientist. Laboratory. Does not satisfy any major program requirements or serve as a prerequisite to any other chemistry courses. This is the second half of a year-long course designed for *non-majors*.

Required Materials

- *Chemistry in Context – Applying Chemistry to Society*. Eubanks, L.P., Middlecamp, C.H., Heltzel, C.E., and Keller, S.W. 9th Edition, McGraw Hill, 2018
- *Chemistry in Context Laboratory Manual*, Sixth Edition, McGraw-Hill, 2009.
Used lab manuals are not acceptable.
- Calculator with scientific notation and logarithmic/exponential functions, your phone is not sufficient.
- Approved safety goggles and laboratory coat for laboratory
- Blue or black ink pen for laboratory

Grading Policy and Grading Scale

The final course grade will be calculated as follows:

- Lecture average (exams, quizzes, assignments, etc.) 55%
- Cumulative final exam 20%
- Lab average 25%

There will be three exams during the semester, not counting the final exam. Their dates will be announced shortly after class starts and this document will be updated on Canvas.

The final course grade will be based on the following point scale:

Points accrued	Letter grade	Points accrued	Letter grade
≥ 93 %	A	76.9-73.0 %	C
92.9-90.0 %	A-	72.9-70.0 %	C-
89.9-87.0 %	B+	69.9-67.0 %	D+
86.9-83.0 %	B	66.9-60.0 %	D
82.9-80.0 %	B-	≤ 59.9 %	F
79.9-77.0 %	C+		

A mid-semester report of unsatisfactory (U) will be reported if you have a C- or below in the course thus far.

Attendance Policy

Class attendance is strongly encouraged. You are responsible for all materials presented in class even if you are absent. The powerpoints will be put up on Canvas.

Attendance in the laboratory is mandatory. Unexcused absences from laboratory cannot be made up and will count as a zero lab grade. Excused absences may be made-up, if possible, at the discretion of the instructor. If you have to miss a laboratory due to an **emergency** or if you expect to be absent due to an intercollegiate athletic event, etc., you should inform the instructor in advance of the original time and date of the lab.

It is also imperative that you be on time for the laboratory. The pre-lab lectures cover important safety and procedural information. If an individual is repeatedly tardy, a **grade deduction** will occur for each instance or the student will not be permitted to perform the experiment.

It is absolutely critical that you respect the dangers inherent in laboratory space. **If I feel your behavior is seriously unsafe to either you or your classmates, you will be asked to leave immediately and will receive a zero for that day's effort.**

Be sure to bring the laboratory manual, lab coat, and goggles to each experiment. Failure to bring the appropriate materials to the laboratory may result in a penalty to your grade.

No eating or drinking in the lab. **Laboratory exercises must be read prior to class.**

You should complete as much of the work as possible during the assigned laboratory time. No unauthorized access to the laboratory is permitted. All experiments must be completed when the instructor is present.

Canvas

You must have access to Canvas (<https://canvas.umw.edu>). Frequently, pertinent articles will be handed out in class or posted on Canvas and the contents thereof will be included in the required information for quizzes and exams. Assignments, announcements and other information will also be posted on Canvas for reference.

General Education and Course Specific Learning Objectives

This course in part satisfies the Natural Science General Education requirement. After completing the course sequence, a student should be able to:

1. Students will be able to describe the scientific methods that lead to scientific knowledge.
2. Students will be able to report and display data collected, interpret experimental observations and construct explanatory scientific hypotheses.
3. Students will be able to use theories and models as unifying principles that help us understand the natural world.
4. Students will gain an understanding for how the natural sciences are used to address societal issues.

My Advice for College Classes

1. Show up to class!
2. Read the text book!
3. Ask questions, either in class or at office hours.

Policy on Recording Lectures

You may make audio recordings of my lectures, just please let me know. If a student is talking for an extended period of time (eg. giving a presentation, not just asking a question) you may NOT record other students. If you would like to record video of the lectures, you must run that by me first. Video recordings must be taken from a fixed position and not contain footage of other students. You should delete all of your recordings at the end of the semester.

Office of Disability Services

The Office of Disability Services has been designated by the University as the primary office to guide, counsel, and assist students with disabilities. If you receive services through that office and require accommodations for this class, please make an appointment with me as soon as possible to discuss your approved accommodation needs. Bring your accommodation letter with you to the appointment. I will hold any information you share with me in the strictest confidence unless you give me permission to do otherwise. If you need accommodations, (note taking assistance, extended time for tests, etc.), I would be happy to refer you to the Office of Disability Services. They will require appropriate documentation of a disability. Their phone number is 540-654-1266.

Title IX Statement

University of Mary Washington faculty are committed to supporting students and upholding the University's *Policy on Sexual and Gender Based Harassment and Other Forms of Interpersonal Violence*. Under Title IX and this Policy, discrimination based upon sex or gender is prohibited. If you experience an incident of sex or gender based discrimination, we encourage you to report it. ***While you may talk to me, understand that as a "Responsible Employee" of the University, I MUST report to UMW's Title IX Coordinator what you share.*** If you wish to speak to someone confidentially, please contact the below confidential resources. They can connect you with support services and help you explore your options. You may also seek assistance from UMW's Title IX Coordinator. Please visit <http://diversity.umw.edu/title-ix/> to view UMW's *Policy on Sexual and Gender Based Harassment and Other Forms of Interpersonal Violence* and to find further information on support and resources.

Resources

Tiffany W. Oldfield, J.D.
Title IX Coordinator
Office of Title IX
Fairfax House
540-654-5656
toldfiel@umw.edu

Myranda Thomson
Title IX Deputy for Students
Area Coordinator
540-654-1184
mthomson@umw.edu

Confidential Resources

On-Campus
Talley Center for Counselling Services –
Lee Hall 106

Student Health Center
Lee Hall 112

Off-Campus
Empowerhouse
540-373-9373

RCASA
540-371-1666

Tentative Class Schedule

Chemistry 106

Week	Date	Activities
1	1/15 - 1/18	<input type="checkbox"/> Introduction & Energy Storage (<u>Chapter 7</u>)
	1/21	<input type="checkbox"/> School Closed – MLK Day
2	1/22 - 1/25	<input type="checkbox"/> Chapter 7, continued. <input type="checkbox"/> Water, A Precious Resource (<u>Chapter 8</u>) <input type="checkbox"/> Lab: Investigation 17 – Exploring Electrochemistry
3	1/28 - 2/1	<input type="checkbox"/> Chapter 8, continued. <input type="checkbox"/> Lab: Investigation 18 – Analyzing Water
4	2/4 - 2/8	<input type="checkbox"/> TEST 1 on 2/5 <input type="checkbox"/> Polymers and Plastics (<u>Chapter 9</u>) <input type="checkbox"/> Lab: Plastics Bags
5	2/11 - 2/15	<input type="checkbox"/> Chapter 9, continued. <input type="checkbox"/> Lab: Plastics Bags
6	2/18 - 2/22	<input type="checkbox"/> Chapter 9, continued. <input type="checkbox"/> Lab: Plastics Bags
7	2/25 - 3/1	<input type="checkbox"/> Chapter 9, continued. <input type="checkbox"/> TEST 2 on 2/28 <input type="checkbox"/> Lab: Making Soap
Break	3/4 - 3/8	<input type="checkbox"/> Spring Break, no classes. (Residence halls remain open)
9	3/11 - 3/15	<input type="checkbox"/> Brewing and Chewing (<u>Chapter 10</u>) <input type="checkbox"/> Lab: Paper Recycling
10	3/18 - 3/22	<input type="checkbox"/> Chapter 10, continued. <input type="checkbox"/> Nutrition (Chapter 11)
11	3/25 - 3/29	<input type="checkbox"/> Chapter 11, continued. <input type="checkbox"/> Lab: Properties of Plastics
12	4/1 - 4/5	<input type="checkbox"/> TEST 3 on 4/2 <input type="checkbox"/> Health and Medicine (<u>Chapter 12</u>) <input type="checkbox"/> Lab: Properties of Plastics
13	4/8 - 4/12	<input type="checkbox"/> Chapter 12, continued <input type="checkbox"/> Genes & Life (<u>Chapter 13</u>) <input type="checkbox"/> Lab: Properties of Plastics
14	4/15 - 4/19	<input type="checkbox"/> Chapter 13, continued. <input type="checkbox"/> Lab: Properties of Plastics
15	4/22 - 4/26	<input type="checkbox"/> Test 4 on 4/23 <input type="checkbox"/> Final Exam Review <input type="checkbox"/> Lab: checkout and bonus exam review time
Final Exam	5/2	<input type="checkbox"/> Comprehensive Final Exam <input type="checkbox"/> 3:30pm – 6:00pm, Jepson 219

Other important dates:

- Friday, Aug. 31st – Last day to add classes (5:00pm).
- Friday, Sept. 14th – Last day to drop without a W.
- Friday, Oct. 26th – Last day to withdraw without an F.
- Saturday, Dec. 15th – Residence halls close at 10:00am.