

Pierce College at Joint Base Lewis-McChord
Course Syllabus: Winter 2020
Course dates: 01/09/2020 – 03/05/2020

COURSE TITLE: Introduction to Chemistry – Hybrid Course

ABBREVIATION: Chem&139

CREDIT HOURS: 5

LECTURE CONTACT HOURS: 50

LAB HOURS: 0

INSTRUCTOR: Don Woods

INSTRUCTOR INTRODUCTION: While considering a career in veterinary medicine, I moved to Pullman, WA (WSU), and obtained my Bachelor's Degree in Microbiology. I then spent several years traveling throughout Canada, the Western US, and Central America in a VW van, ending my travels in Maine (the "Oregon" of the East Coast). After living in Maine for a few years, I moved to Boston and spent a decade building my own financial services agency, hiring and training staff, managers, & agents to market securities, insurance, mortgages, and estate planning. I moved back to the Northwest, taught for several years at a number of community colleges south of Seattle, and then returned to graduate school at the UW to obtain my Masters Degree in Chemistry (Yes, I'm a "Cougar" AND a "Dawg" – along with being an "Oregon Duck" after growing up in Portland, OR). I have taught biological and chemical sciences at the college level for over twenty years.

COMMUNICATIONS: Email at dwoods@pierce.ctc.edu

PRE-REQUISITES: MATH 098 or equivalent with a grade of 2.0 or better or placement test score above MATH 098.

CATALOG DESCRIPTION: CHEM& 139 is a non-lab introductory course in chemistry for students intending to take CHEM& 161-163 (General Chemistry).

REQUIRED TEXT AND MATERIALS:

- *Introduction to Chemical Principles*, 11th Edition. H. Stephen Stoker, Pearson Prentice Hall, 2014
- Textbooks are available at <http://bookstore.mbsdirect.net/piercemilitary.htm>
- A calculator capable of exponents and logarithms is required. Only calculators with no programming or memory functions will be allowed during Exams.

COURSE GUIDANCE:

1. **Online Elements:** Portions of this course will be available online, in Canvas.
 - **CANVAS:** <https://piercemil.instructure.com/login>
2. **Course Incompletes** are not automatic and must be requested from me. Incompletes must be approved and arranged with me.
3. **Cell Phones / Computers:** Cell phones must be put in "silent" mode. Any disruption of class (Including Text Messaging) may result in a loss of points. ALL electronic devices must be put away during class/lab. Students who are texting during class may be asked to leave.
4. **Attendance & Makeup's:** NO makeup exams. NO extra credit will be available to make up for missed or failing work. It is your responsibility to get notes from a classmate if you are absent.
 - No tests will be given after the class has taken it. Under extraordinary circumstances (e.g. Hospital, Family Death, Military Duty), with prior notice and at my discretion, you may be allowed to take a unit exam early. I must agree to any changes well in advance. E-mail me for any specific arrangements you must make.
5. **Student Responsibilities:** Please remember that it is your responsibility to notify me of major changes in your circumstances (e.g. deployment) that affect your ability to complete all course work within the course timeline.
6. **Etiquette:** Treat others as you would like to be treated, respectfully and compassionately.
7. **Proctoring:** This course may have online proctoring required for the Final Exam. If so, I will furnish proctoring information so you can make necessary arrangement well in advance of the proctored assessment(s).
8. **Withdrawal:** You must withdraw through registration to receive a "W". Students who stop attending class without officially withdrawing will receive a grade of 0.0. "NC" will not be given to replace a low grade.
9. **Plagiarism software:** Plagiarism software may be in use during your course.

STUDENT OUTCOMES: Upon successful completion of this course, a student should be familiar with:

1. Exhibit proficiency using a scientific calculator.
2. Express and manipulate numbers using scientific notation and significant figures.
3. Recognize the importance of significant figures in measurements.
4. Apply significant figures to measurements.
5. Solve problems using units and dimensional analysis including cubed units such as m³ to cm³ and density.
6. Generate and use conversion factors from available information.
7. Construct and interpret graphs.
8. Describe the fundamental organization of the periodic table.
9. Describe the fundamental differences between the states of matter.
10. Describe the basic structure of an atom.
11. Use inorganic nomenclature system including a discussion of the properties of common acids and bases and their pH.
12. Predict when an ionic or covalent bond will form.
13. Relate the mass of a substance to the concept of the mole and Avogadro's number.
14. Write and balance chemical equations.
15. Perform mole-mole, gram-gram, percent and theoretical yield calculations from a balanced equation.

COURSE REQUIREMENTS:

1. **HOMEWORK:** Much of the learning occurs as you struggle with homework. I have assigned “End-of-Chapter” problems from your textbook, but they are not graded or submitted. It is your responsibility to complete them for your understanding.
 - The key to success in this class is to keep up with the material and do lots of practice problems.
2. **LECTURE QUIZZES:** After each one or two Lecture Videos, there is a Quiz. You can earn up to 10 points on each Quiz and you have two hours complete it. Anything over 70% (7 points) is extra credit You have to move sequentially through each Unit (or “Module”), and cannot move on until you have submitted each Quiz.
3. **EXAMS:** Exams will include questions from Lecture Videos, End-of-Chapter Homework, and Quizzes. **The lowest Unit Exam score will be dropped** (This does not include Final exam).
 - **YOU WILL NOT BE ABLE TO LEAVE THE TESTING ROOM ONCE TESTS ARE PASSED OUT.** Be sure you have taken care of all details prior to the exam.

GRADING: Each assignment and assessment will be given a specific point value. The earned value of all possible points will determine grade, per Pierce College published policy. See <http://www.pierce.ctc.edu/grading> for District Grading Policy. The schedule is subject to change if the need arises.

WEIGHT OF ASSIGNMENTS & GRADE SCALE:

Assignment	Points	Grade	% of Total Points
Video Quizzes (Online):	7	4.0	95.0% and above
Pre-Quizzes (Class):	20	3.0	85.0% (+ 0.1 for each 1% over 85)
Unit Exams (Class):	50	2.0	75.0% (+ 0.1 for each 1% over 75)
Final Exam (Class):	100	1.0	60.0% (+ 0.067 for each 1% over 60)
		0.0	Below 60.0%
			(e.g. 92% → 3.7 grade)

Grade Point	Letter Grade	Grade Point	Letter Grade	Grade Point	Letter Grade	Grade Point	Letter Grade
4.0 ~ 3.5	A	3.4 ~ 2.5	B	2.4 ~ 1.5	C	1.4 ~ 1.0	D

COURSE SCHEDULE: All course dates for labs and exams, along with all due dates for assignments, are listed in Canvas.

Unit	Chapters (Sections)	Requirements	Outcomes
Unit-1	2, 3, & 4	Unit Quizzes, PreQuiz, Exam 1	1, 2, 3, 4, 5, 6, 7, 9
Unit-2	5, 6 (Sec 1-2), & 9	Unit Quizzes, PreQuiz, Exam 2	8, 10, 12, 13, 15
Unit-3	8	Unit Quizzes, PreQuiz, Exam 3	11, 12
Unit-4	7	Unit Quizzes, PreQuiz, Exam 4	12
Unit-5	6	Unit Quizzes, PreQuiz, Exam 5	8
Unit-6	10	Unit Quizzes, PreQuiz, Exam 6	11, 13, 14, 15
Final	2-10	Final Exam	

CONSENT AGREEMENT: A Pierce College course requires frequent interaction with your instructor. It is, therefore, essential that you agree to the conditions set forth in the course syllabus. After you have read the course syllabus, let us know (do not wait) if you do not agree with the course conditions and requirements. If we do not hear from you within three (3) days from the start of the course, we will assume you agree with the conditions set forth in this syllabus.

POLICIES AND PROCEDURES: Pierce College Military Program Policies and Procedures are located at: <http://www.pierce.ctc.edu/military/canvas/Policies/index.html>, or on the Policies and Procedures menu item in Canvas.

ACCESSIBILITY: Your experience in this class is important, and it is the policy and practice of Pierce College to create inclusive and accessible learning environments consistent with federal and state law. If you experience barriers based on disability, please seek a meeting with the Access and Disability Services (ADS) manager to discuss and address them. If you have already established accommodations with the ADS manager, please bring your approved accommodations (green sheet) to me at your earliest convenience so we can discuss your needs in this course. ADS offers resources and coordinates reasonable accommodations for students with disabilities. Reasonable accommodations are established through an interactive process between you and the ADS manager, and I am available to help facilitate them in this class. If you have not yet established services through ADS, but have a temporary or permanent disability that requires accommodations (this can include but not be limited to; mental health, attention-related, learning, vision, hearing, physical or health impacts), you are encouraged to contact ADS at 253-964-6526 (Fort Steilacoom) or 253-840-8335 (Puyallup).

Chem-139 (Woods) McChord: Winter 2020

This calendar is subject to modification if an unforeseen event arises.

It is your responsibility to attend class should a change occur.

Monday	Tuesday	Wednesday	Thursday	Friday
Jan 6, 2020	7	8	9 Class Begins	10
13	14 Bring Your PowerPoint Lecture Notes - To Use On PreQuizzes	15 Unit-1 Quizzes Due	16 PQ-1 & Exam-1	17
20	21	22 Unit-2 Quizzes Due	23 PQ-2 & Exam-2	24
27	28	29	30 Pierce Faculty Day No classes	31
3	4	5 Unit-3 Quizzes Due	6 PQ-3 & Exam-3	7
10	11	12 Unit-4 Quizzes Due	13 PQ-4 & Exam-4	14
17 President's Day	18	19 Unit-5 Quizzes Due	20 PQ-5 & Exam-5	21
24	25	26 Unit-6 Quizzes Due	27 PQ-6 & Exam-6	28
2	3	4	5 Final Exam	6
9	10	11	12	13
16	17	18	19	20
23	24	25	26	27