

Pierce College at Joint Base Lewis-McChord
Course Syllabus
Course dates: January 6 – March 11

COURSE TITLE: Preparatory Chemistry

ABBREVIATION: CHEM&100

CREDIT HOURS: 5

INSTRUCTIONAL HOURS: 50

LAB HOURS: N/A

INSTRUCTOR: Dr. Heidi L. Jordan

INSTRUCTOR INTRODUCTION:

I am originally from Wisconsin and graduated with a degree in Biology from the University of Wisconsin-Eau Claire, with a minor in Marine Science. My schooling took me to the University of West Florida in Pensacola where I earned a Master's degree in Marine Ecophysiology. While in Florida I was part of multiple research cruises to the Florida Keys and Dry Tortugas. From this research I was able to be part of multiple published scientific journal articles. My graduate research dealt with feeding and reproductive behaviors in Atlantic Stingrays. While at UWF I taught Biology 101 (lecture/lab), Introduction to Marine Biology and Oceanography (lecture/lab) and Comparative Animal Physiology (lab). From there I moved to Panama City to work for the State of Florida, Department of Agriculture, Division of Aquaculture where I was an Environmental Specialist for two years. During my time in Florida I met my husband and we moved to the Dayton, Ohio area. While in Dayton, I attended Wright State University and received my PhD in Biomedical Sciences. After I graduated with my PhD. We moved to South Carolina where I taught Biology 101 lecture/lab at Tri-County Technical College in Pendleton, SC and Biology 102 lab at Greenville Technical College in Greenville, SC. I also taught an online graduate level Anatomy and Physiology course at Clemson University, Clemson SC. From there we moved to Illinois where I taught Biology 101 lecture /lab as well as a Human Biology at Lindenwood University in Bellville, IL. We moved to the WA area at the end of April 2017 and during the summer quarter I taught Biology 100 at Pierce College- Puyallup and have taught at the McChord campus since Fall 2017. In addition to Chem 100, I have taught Bio 241/242 as well as Bio 100 and 160. I have recently moved to the Boston area and am now teaching online courses. I am an avid runner and have completed multiple marathons/half marathons, 3 Ironman triathlons and a handful of half Ironman triathlons. My husband and I have two beautiful children who keep us quite busy. I look forward to the upcoming quarter and please let me know if you have any issues or questions throughout our time together. Thanks.

COMMUNICATIONS: All course communications will be through the Canvas course inbox.

PREREQUISITE: None

CATALOG DESCRIPTION: Introductory course in chemistry for students intending to take CHEM& 121 and CHEM& 131. Discussion of basic chemical concepts, including atomic structure, periodic properties, chemical bonding, and chemical nomenclature.

REQUIRED TEXT AND MATERIALS: *Foundations of College Chemistry*, Alternate 14th Ed., by Hein, Peisen, & Miner, John Wiley & Sons, Inc., 2014

COURSE GUIDANCE:

1. **Online Elements:** Portions of this course will be available online, in Canvas.
2. **Proctoring:** This course will have online proctoring required for assessments. I will furnish proctoring information very early in the course so you can make necessary arrangements well in advance of the proctored assessment(s).
3. **Course Expectations:** As a student, you can expect that I will respond to your e-mail within 24 hours and will grade assignments/tests/quizzes within four (4) days. Exceptions will be announced in advance. Please contact me immediately if you have not heard from me within these timelines.
4. **Introductions:** Students are expected to post a short (one paragraph) introduction to the course Discussions Area during the first week of the course. I have guidelines within the course for the introduction located in Module 1.
5. **Discussions:** This course may have discussions as part of the curriculum. Students may also desire to discuss topics with other students in an unscheduled manner. I, as part of the course, may publish discussion questions/topics and require your input. Should you desire to hold a discussion with other students enrolled in your course, you may be authorized to create your own discussion topics.
6. **Course Incompletes:** are not automatic and must be requested from me. Incompletes must be approved and arranged with me. Incompletes can only be considered if you have completed at least half of the material in the course. In other words, you must have completed all material up to and including the Midterm Exam in order for an incomplete to be considered. Incompletes cannot be considered in the final week of the course (i.e. incompletes will not be considered in Week 9 of a 9-week course). Documented, extenuating circumstances may be considered if you require an incomplete but do not meet these requirements.
7. **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.
8. **Plagiarism software:** Plagiarism software may be in use during your course. Any plagiarism and/or cheating will result in a score of 0 on the question in which plagiarism/cheating has been detected and a warning will be issued. A second offense will result in a score of 0 for the assignment/quiz/exam and another warning will be issued. Any following offenses will result in a 0.0 for the course.
<http://www.pierce.ctc.edu/library-plagiarism>
9. **Etiquette:** Etiquette for classroom and online courses is the same. Treat others, as you would like to be treated, respectfully and compassionately.

STUDENT OUTCOMES: Upon successful completion of this course, you should be able to:

1. Recognize and use chemical symbols for elements and compounds.
2. Balance simple chemical equations.
3. Solve problems using units in dimensional analysis including kilo-, centi-, milli- metric prefixes, along with simple English/metric conversions.
4. Express and manipulate numbers using scientific notation and significant figures.
5. Appreciate why measured quantities need to be expressed using significant figures.
6. Relate energy changes to chemical equations.
7. Describe the basic structure of atoms and ions and relate them to their location on the Periodic Table, their charge, and the number of fundamental particles.
8. Relate physical and chemical properties to the Periodic Table, including metals, non-metals, metalloids, group names, ionic charge, and valence electrons.
9. Demonstrate an understanding of the basics of chemical bonding including polarity of diatomic molecules.
10. Demonstrate a working knowledge of inorganic nomenclature.
11. Describe the states and properties of matter.
12. Demonstrate an understanding of the mole and Avogadro's number.
13. Perform gram/mole conversions and perform mole/mole stoichiometric calculations.
14. Make and interpret graphs.
15. Use chemical vocabulary appropriately.

COURSE REQUIREMENTS:

1. Students will examine the lecture(s) and any supplemental material for each Module.

2. Each Module will consist of one or more chapters from the text, depending on the complexity of the material.

3. There will be one Honorlock practice quiz to test your system's compatibility and to familiarize yourself with Honorlock (proctoring software). If your system is not compatible with Honorlock, please inform your instructor so that other arrangements can be made. The Honorlock practice quiz is due as per the "Course Schedule". Please contact your instructor if a situation arises that prevents you from submitting the Honorlock practice quiz on-time or from determining if the software is not compatible with your system.

4. Each Module will consist of an assignment (40 points) based on questions assigned at the end of the chapters. Please use the provided answer sheet attached to each assignment as a template for submitting your answers. It is a good idea to finish the assignment before taking the accompanying quiz. Assignments are graded on attempting the assigned problems (20 points) and correctness of the answers (20 points).

****Assignment 6 is divided into two parts with an overall total of 40 points. Half of the points for each part of Assignment 6 will go towards attempting the assigned problems while the other half of the point will go towards correctness of the answers.**** Assignments are due the Wednesday following the week they are assigned as per the "Course Schedule". One (1) point will be deducted per day the assignment is late up to 20 points. Please contact your instructor if a situation arises that prevents you from submitting an assignment on-time.

5. Each Module will consist of a Quiz worth 20 points. Quizzes are based on the lecture and text-book readings. There will be only **one** opportunity to take each quiz and each quiz has a **time limit** (time limit varies for each quiz). **Your quiz time will expire once the time limit has been reached.** It is recommended to take each quiz after reading the lectures, chapters, and finishing the assignment accompanying that quiz. Quizzes are due the Monday following the week they are assigned as per the "Course Schedule". One (1) point will be deducted per day the quiz is late up to 10 points. Please contact your instructor if a situation arises that prevents you from submitting a quiz on-time.

6. You will be allowed to retake the quiz on which you scored the lowest **if you** request to do so. It is suggested that you wait until you have completed all of your quizzes before requesting to retake quiz. The questions on the quiz will be different on the 2nd attempt and you will be required to keep the 2nd score even if it is lower than your first score on your quiz.

7. There will be a midterm exam and a **cumulative** final exam covering key points in the course. **Your midterm and final exams will be proctored.** A study guide with general concept listings will be provided prior to each exam. The midterm and final exams will be worth 100 points each. There will only be **one** opportunity to take each of these exams. Both exams have a time limit of 2-hours. Your exam will expire once the time limit has been reached. **Please send a message to your instructor once you have completed an exam.** Exams are due on the dates per the "Course Schedule". Two (2) points will be deducted per day the exam is late up to 50 points (**prior approval will be needed in order to submit a late final exam.**).

Please contact your instructor if a situation arises that prevents you from submitting an exam on-time.

8. Two (2) points extra credit will be provided for providing "proof of completion" of the course evaluation. More information will be provided in the course.

PROCTORING SOFTWARE: Honorlock will proctor your exams this semester. Honorlock is an online proctoring service that allows you to take your exam from the comfort of your home. You DO NOT need to create an account, download software or schedule an appointment in advance. Honorlock is available 24/7 and all that is needed is a computer, a working webcam, and a stable Internet connection.

To get started, you will need Google Chrome and to download the Honorlock Chrome Extension. You can download the extension at [//www.honorlock.com/extension/install](http://www.honorlock.com/extension/install)

When you are ready to test, log into Canvas, go to your course, and click on your exam. Clicking "Launch Proctoring" will begin the Honorlock authentication process, where you will take a picture of yourself, show your ID, and complete a scan of your room. Honorlock will be recording your exam session by webcam as well as recording your screen. Honorlock also has an integrity algorithm that can detect search-engine use, so please do not attempt to search for answers, even if it's on a secondary device.

Good luck! Honorlock support is available 24/7/365. If you encounter any issues, you may contact them by live chat, phone (855-828-4004), and/or email (support@honorlock.com).

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 the Policies and Procedure section)

WEIGHT OF ASSIGNMENTS/ASSESSMENTS:

Component	# per module	# per course	Value
Assignments (40 pts. each)	1	6	240 pts. total
Honorlock Practice Quiz (0 pts. each)	N/A	1	0 pts. total
Quizzes (20 pts. each)	1	6	120 pts. total
Exams (100 pts. each)	N/A	2	200 pts. total
Total points for all course work = 560 points.			

Note: Divide the points you have earned in the course by 560 to calculate your %.

GRADE SCALE: See <http://www.pierce.ctc.edu/policy-grading> for District Grading Policy)

Grade Point: 4.0 - 3.9	Letter Grade: A	Percentage: 100 – 94%
Grade Point: 3.8 - 3.5	Letter Grade: A-	Percentage: 93 – 90%
Grade Point: 3.4 – 3.2	Letter Grade: B+	Percentage: 89 – 87%
Grade Point: 3.1 – 2.9	Letter Grade: B	Percentage: 86 – 84%
Grade Point: 2.8 – 2.5	Letter Grade: B-	Percentage: 83 – 80%
Grade Point: 2.4 – 2.2	Letter Grade: C+	Percentage: 79 – 77%
Grade Point: 2.1 – 1.9	Letter Grade: C	Percentage: 76 – 74%
Grade Point: 1.8 – 1.5	Letter Grade: C-	Percentage: 73 – 70%
Grade Point: 1.4 – 1.2	Letter Grade: D+	Percentage: 69 – 65%
Grade Point: 1.1 – 1.0	Letter Grade: D	Percentage: 64 - 51%
Grade Point: 0.0	Letter Grade: F	Percentage: < 50%

COURSE SCHEDULE:

You will accomplish each module's learning objectives, which align with the course outcomes, by completing the readings and assessments as listed in the schedule, below.

Week	Module	Chapters	To Do	Due Dates	Outcomes
Week 1	Module 1	1, 4, 3: Intro to Chemistry, Properties of Matter (Sections 4.1 - 4.2), Elements & Compounds	·Introductory Discussion ·Assignment 1 ·Quiz 1	·Assignment 1 & Quiz 1 DUE 13 JAN	1,8,11
Week 2	Module 2	5, 10: Atomic Structure, Atomic Theory	·Assignment 2 ·Quiz 2 ·Honorlock Practice Quiz (proctored)	·Assignment 2 & quiz 2 Due 20 JAN ·Honorlock practice Quiz DUE 20 JAN	1, 7
Week 3	Module 3	6, 11, 13: Nomenclature, Chemical Bonds (Skip Section 11.10), Liquids (Section 13.5 only)	·Assignment 3 ·Quiz 3 ·Study Guide Provided	·DUE 27 JAN	1, 7- 10, 13, 15
Week 4	Review	Review Chapters 1, 3, 4 (4.1 - 4.2), 5, 6, 10,11 (no 11.10), 13	·Midterm Exam (proctored)	· DUE 3 FEB	1, 7 - 10, 13, 15

Week	Module	Chapters	To Do	Due Dates	Outcomes
		(13.5) Review All Supplemental Materials			
Week 5	Module 4	8: Chemical Equations	· Assignment 4 · Quiz 4	· DUE 10 FEB	1, 2, 6, 9, 15
Week 6	Module 5	4 cont., 2: Properties of Matter (Sections 4.3 - 4.6), Standards of Measurement	· Assignment 5 · Quiz 5	· DUE 17 FEB	1, 3 - 6, 12, 13, 15
Week 7	Module 6	7, 9: Composition of Compounds, Calculations from Chemical Equations	· Assignment 6.1	· DUE 24 FEB	1 - 5, 10, 11, 13, 14, 15
Week 8	Module 7	Review of Chapters 7 & 9	· Assignment 6.2 · Quiz 6 · Study Guide Provided · End of Course Survey	· DUE 3 MAR	1, 7, 8, 15
Week 9	Review	Review Chapters 1-11 & 13.5 Review All Supplemental Materials	· Final Exam (proctored)	· DUE 11 MAR	1-15

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:

Access Pierce College at Joint Base Lewis-McChord and Pierce College District here: [Pierce College at JBLM Policies and Procedures](#)

ADS SERVICES:

Pierce College values diversity and inclusion; we are committed to fostering mutual respect and full participation for all students. My goal is to create a learning environment that is equitable, inclusive, and welcoming. If you have or think you may have a disability that may affect your work in this class and feel you need accommodations, contact Access and Disability Services at ADS@pierce.ctc.edu or (253) 964-6468 to see if you are eligible to receive services.

If you are already approved for accommodations through the ADS, have requested your accommodations for this quarter and would like to use your accommodations in my class please connect with me outside of class time to discuss your needs.

REASONABLE ACCOMMODATIONS FOR FAITH/CONSCIENCE:

Students who will be absent from or endure significant hardship in course activities due to reasons of faith or conscience may seek reasonable accommodations so that grades are not impacted. Such requests must be made in writing within the first two weeks of the beginning of the course. Students should review the Accommodations for Faith/Conscience Policy and follow the procedures: <https://www.pierce.ctc.edu/policy-faith-conscience>