Introduction to Chemistry

CHM 1025, Section 4A01

Summer B - 2019

INSTRUCTOR: Kaylee Todd (kmtodd8485@chem.ufl.edu)

COURSE TA: Erik Ferenzcy (erikferenzcy@chem.ufl.edu)

OFFICE HOURS: Kaylee: TBD

TA Erik: TBD

LECTURE: MTWF (not Thurs.) 3:30-4:45pm (6th period), Flint 50

COURSE DESCRIPTION: CHM 1025, a 2-credit course, is offered for students who wish to strengthen their understanding of basic chemistry concepts before beginning the general chemistry sequence (CHM2045/2045L, CHM2046/2046L). This introductory readiness course in general chemistry is for those with weak yet satisfactory backgrounds in high school chemistry and algebra.

A grade of "C" or better is required for progression to CHM 2045.

COREQUISITES: MAC 1147 or the equivalent

COURSE COMMUNICATIONS: The instructor and course TA can be contacted via the mail function in Canvas. Please allow 24 hours for a response during the week and 48 hours for the weekend. Emails are not intended for distance learning – office hours are recommended. Course announcements will be made during lecture and may not be repeated via email/Canvas announcement. Check the lecture notes for announcements made in class before emailing the instructor or course TA. If a student is absent from lecture, it is their responsibility to ask a CLASSMATE what they missed, don't bother emailing the instructor/course TA about missed lecture content. ***Any and all questions regarding grades will NOT be discussed via email; grades can only be discussed IN PERSON.***

TEXTBOOK and REQUIRED MATERIALS:

A significant portion of your grade stems from **electronic homework (ALEKS)** associated with an ebook (Introduction to Chemistry, Bauer, Birk and Marks, 5th ed., McGraw-Hill). ALEKS also has its own textbook, the ALEKSPEDIA; the textbook for this course, however, is the Bauer book.

There are two options for purchasing access to homework/ebook: *See Assignment Policies →ALEKS section for details.*

A paperback version of the text is *completely optional*. The bookstore may stock paper versions of the text, or you can order one directly through ALEKS. A paper version is on reserve at the Marston Science Library for reference purposes.

SPECIFIC GOALS OF CHM1025: You will be required to analyze scientific concepts and think critically. This means being able to answer both quantitative (mathematical) and qualitative (conceptual) multiple choice questions in a limited period of time. Additionally, you will have to write or orally communicate during office hours with the instructor or TAs. You will review the importance of chemistry in your everyday lives and utilize the

methods of science as a logical means of problem solving through observations and critical thinking. This means you must analyze information carefully and logically from multiple perspectives, using discipline specific methods, and develop reasonable solutions to problems. To ensure your competency in these concepts, you will be required to complete online homework assignments, take quizzes and exams, and communicate your chemistry knowledge in a written format that requires critical thinking, analysis of problems, and drawing conclusions.

COURSE CONTENT:

We will loosely follow the Bauer textbook as well as using compilations of Kaylee's notes, tips, and tricks from years of tutoring general chemistry. The topics we will cover are as follows (chronologically, from Bauer textbook):

Unit 1	Unit 2	Unit 3
Chapters: 1 6.6-6.7 (specific heat and calorimetry, Energy of food) 2 3 5, part 1: 14.1-14.2	Chapters: 5, part 2: 11.5 6 10.1 7 8.1-8.3	Chapters: 8.4-8.5 10.2 11.1-11.4 13 9 concepts

****I reserve the right to alter the pace and material covered for each unit** as I see fit. I also reserve the right to cover material outside of what is covered in the Bauer textbook, as well as omit topics from what is presented in the textbook.

In the event that I am away for travel, lectures may be recorded in advance and provided to the students via Canvas or the course TA (or another trusted grad student) will lecture in my place. The material that is covered while I am away is *EQUALLY FAIR GAME* on any assessment as the material I cover in class. Students may still be required to attend the lecture period in my absence to complete the accompanying Canvas Clicker questions.

DISCLAIMER: *This syllabus represents my current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunities. Such changes will be communicated clearly and should be expected.*

GRADING POLICIES:

Grading disputes (other than simple addition errors) will only be considered if submitted in writing within 3 class-days of the due date. Grading disputes will only be addressed in person. Any assignment/exam grade that is being disputed will be evaluated as a whole, meaning the score could go up or down and the new score is non-negotiable. *All grade disputes must be handled before the end of the last exam period (8/7) and IN PERSON;* ***August 8 is a day too late*** *(with the exception of the last exam which may be disputed only on August 8 in person).*

GRADE DISTRIBUTION:

1. Assembly exams (3 at 20 % each) = 60 %
2. Canvas Clickers and Clicker Make Ups and Attendance Points = 10 %
3. ALEKS Objectives (7 %) and ALEKS Pie (5 %) = 12 %
4. Worksheets and Discussions= 8 %
5. Homework/Retrieval Quizzes (5 total) = 10 %

GRADING SCALE: (***firm, no rounding will be done***)

A	A-	B+	B	B-	C+	C	D+	D	D-	E
90 %	86	83	80	77	73	69	66	63	60	< 60

For more information:

https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx#hgrades

http://www.isis.ufl.edu/minusgrades.html

****Please do not ask** me to "bump your grade up" or ask for extra assignments/points at the end of the semester. The answer will be no. (No exceptions!) Also do not ask me to round your grade to the nearest whole number, the answer will also be **no.**

EXAM POLICIES:

EXAM DATES: **3** "***cumulative***" progress assembly exams will be administered during the term.

TIMES/DATES: 7-9 pm on 7/15 (M), 7/29 (M), 8/7 (W)

EXAM POLICY: *Exam locations will be announced the lecture before the exam* (Monday's exam will be announced on Monday, Wednesday's exams will be announced on Wednesday). Each exam will consist of multiple choice questions of varying point values. Any material covered prior to the exam date is eligible to appear on the exam. NO exam scores will be dropped. ***Only 1- or 2-line calculators are allowed (NO graphing calculators). Cell phones or other electronic devices -including smart watches- are prohibited during exams. Scantron errors are non-negotiable (this includes form code errors, mis-bubbled answer choices, registry errors, name or UFID errors).***

MAKE UP POLICY: Conflict exams may be offered to students with another assembly exam at the same time in a course with a higher number than ours, or to students with well-documented, UF-approved reasons (https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx). Such conflict exams are only offered in advance of the assembly exam. Conflict exams must be scheduled with the instructor ***1 week in advance***. If you fail to do so, you may not be accommodated and the missed exam will result in a "0" for the exam score. Special note: personal travel does NOT qualify for make-up exams.

ASSIGNMENT POLICIES:

1. ALEKS OBJECTIVES AND ALEKS PIE: A significant portion of your grade stems from electronic homework (ALEKS) associated with an ebook (*Introduction to Chemistry*, Bauer, Birk and Marks, 5th ed., McGraw-Hill). ALEKS also has its own "textbook," the ALEKSPEDIA; the textbook for this course, however, is the Bauer text.

You can purchase one of two access codes for ALEKS. **1:** The first includes ALEKS homework and the ebook of Bauer, Birk & Marks. **2:** The second includes only the ALEKS homework for the course and the ALEKSPEDIA reference material. If you're able to visit campus and refer to the textbook we have on reserve at Marston Science Library, the second option is more affordable.

This course is participating in UF All Access. Beginning the first day of the semester (not before that time) students can opt in to consent to have the purchase price charged to your student account. Alternatively, you can purchase an access code for the materials at the UF Bookstore (at a slightly higher price). The opt-in code is the comprehensive package (ALEKS homework and the ebook of Bauer, Birk & Marks).

To opt in, navigate to: https://www.bsd.ufl.edu/G1CO/IPay1f/start.aspx?TASK=INCLUDED. You will be prompted to log in using Gatorlink credentials. Follow the prompt to authorize charges to your student account. The access code will then be provided. Copy the access code to your clipboard. In the Canvas course, click on Modules, then select the link to *ALEKS - Science* to join the ALEKS course. Provide the access code when prompted to do so. If you have any questions about the authorization process or refunds contact Included@bsd.ufl.edu.

A paperback version of the text is completely optional. The bookstore may stock paper versions of the text, or you can order one directly through ALEKS. A paper version is on reserve at the Marston Science Library for reference purposes.

You will access ALEKS directly from within Canvas (Modules>ALEKS-Science). You are graded for both on-time completion of ALEKS objectives and for completion of your ALEKS pie. ALEKS objectives are due throughout the term, while ALEKS pie completion is *due at the start of the last exam (8/7 at 7:00 pm).* Credit for completion of an ALEKS objective is awarded by mastering the assigned topics before their individual deadlines (firm). To account for the "life happens" factor, the lowest two ALEKS objective scores will be dropped. Even if you don't complete a topic by the objective deadline, you will still need to complete it to earn all of your points for the ALEKS pie by the end of the semester. The work you do on ALEKS objectives counts towards this goal. You can catch up or work ahead on your pie progress during Open Pie periods. There are regularly scheduled Open Pie times in the course. Whenever you complete an ALEKS objective before its due date/time you also will enter Open Pie mode. Full credit for the ALEKS pie is awarded for having the entire ALEKS pie complete by the start of the final exam.

ALEKS homework is not ever graded/regraded manually – *get help before an assignment is due*. There are no extensions for technical difficulties or other reasons – the assignments are all available well in advance of their due dates. *There are computers available on campus for student use if you have an issue with your personal computer*. If you have a legitimate reason for an extension (illness, family emergency, etc.) you must contact the Dean of Students Office to have the situation verified before an extension will be considered. For technical help with ALEKS, contact ALEKS support (not the Help Desk or your instructor).

*Note: The ALEKS homework is not intended to be your only source of practice problems for this course. You should anticipate needing to solve problems beyond those assigned in ALEKS.

2. CANVAS CLICKERS: We will be utilizing **Canvas Clickers** as a classroom response system, beginning on day 1. You must bring a web-enabled, Canvas-usable device (cell phone, tablet, or laptop) to each class to participate. Usually, Canvas Clickers will be completed in class, however it is up to the instructor to extend the due date beyond the end of class time if she sees that more time would be beneficial to the students.

You must answer each question correctly to receive full credit. Points missed in Canvas Clickers, whether for an absence or getting the incorrect answer, can be made up by completing the designated **Clicker Make Ups** within Canvas. Clicker Make Ups will be assigned throughout the semester. Since I use a total number of points for the make-up sets in my calculations, it doesn't matter which set you complete your make-up points in, as long as you do them before the deadline (beginning of the last exam on 8/7). There will be significantly less Clicker Make Up points available than there are Canvas Clicker points and the Clicker Make Up questions may be more difficult than the Canvas Clicker questions. Randomly assigned **Attendance points** will be added as extra points to this category and will be administered through Canvas. The maximum number of points available is equal to the number of Canvas Clicker points; it is possible to achieve above 100 % in this category with the addition of Make Up Clickers and Attendance Points.

3. **QUIZZES**: Two types of quizzes (homework and retrieval) will be administered through Canvas. Quiz material will draw heavily from the optional end of chapter problems in the textbook, Canvas Clicker questions, and lecture notes. The quizzes will be timed (a generous amount of time will be allotted) and multiple attempts will be allowed. The lowest quiz score will be dropped. The Homework quizzes are intended as a study tool so you can know you're ready for the exams. The Retrieval quizzes are intended to strengthen your retention of exam material after exam 1 and 2 to prepare for exam 3, which is cumulative.

4. **WORKSHEETS and DISCUSSIONS**: A few worksheets and discussion posts will be administered through Canvas. You are to print them, fill them out, and upload to canvas as a PDF to be graded. Further instructions and topics will be provided via Canvas.

**All extra credit, make-up points, attendance points, and dropped grades will be taken care of AFTER all assignments are due (AFTER exam 3). The time to take care of possible grading mistakes is BEFORE exam 3.

COURSE TECHNOLOGY: All UF students are expected to have reliable access to a computer; suggested configurations may be found here: https://training.helpdesk.ufl.edu/computing.shtml.

FREE CHEMISTRY HELP:

IN LECTURE TA'S: I will have a large number of undergraduate TAs and the course TA present during lecture who are solely there to help YOU. When we are working Canvas Clickers during lecture, you should take full advantage of having my TAs available. In order to make the best use of our lecture time, as soon as you get stuck or are unsure about a question, you should call over a TA. Even if you have an answer, I encourage you to ask the TAs if your answer is correct so you can confirm whether you have worked the problem correctly or not. The questions in lecture are not designed to be a quiz, they're designed to be an active team learning experience.

OFFICE HOURS: These are truly the best opportunity to seek help with this course. Both Kaylee and the graduate TA will hold plenty of office hours throughout the week. These are drop-in style (no appointment needed!) and can be used to work on anything related to the course. ATTEND!!!!

UF TEACHING CENTER: FREE help for our course is available at the UF Teaching Center. Times of operation can be found on their website: https://teachingcenter.ufl.edu

CHEMISTRY LEARNING CENTER (CLC): In addition to the office hours of myself and my TA, graduate student TAs are typically available daily from 9am – 5pm in JHH 105 for General Chemistry. Check the schedule.

GENERIC CAVEAT: Office hours should be used as a supplement to your own individual studying, NOT a replacement. Attendance alone will not bring success, hard work is essential to achieving success.

"You can teach a student a lesson for a day, but if you can teach him to learn by creating curiosity, he will continue the learning process as long as he lives."

– Clay P. Bedford

UNIVERSITY POLICIES:

UNIVERSITY POLICY ON ACCOMMODATING STUDENTS WITH DISABILITIES: Students requesting accommodation for disabilities must first register with the Dean of Students Office (http://www.dso.ufl.edu/drc/). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. **Accommodations are not retroactive**, therefore, students should contact the office as soon as possible in the term for which they are seeking accommodations. Note that the DRC requires advance notice to schedule accommodated exams.

UNIVERSITY POLICY ON ACADEMIC MISCONDUCT: As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity." You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida. The following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." **It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks** (e.g. assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see: http://www.dso.ufl.edu/SCCR/honorcodes/honorcode.php."

NETIQUETTE: COMMUNICATION COURTESY: All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. http://teach.ufl.edu/wpcontent/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf

FEEDBACK: Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu

CANVAS SUPPORT: For issues with technical difficulties for Canvas, please contact the UF Help Desk at:

Learning-support@ufl.edu ; (352) 392-HELP - select option 2 ; https://lss.at.ufl.edu/help.shtml

GENERAL EDUCATION:

This course satisfies the General Education requirement in the Physical Sciences.

GENERAL EDUCATION STUDENT LEARNING OUTCOMES:

Area	Institutional Definition	Institutional SLO
CONTENT	Content is knowledge of the concepts, principles, terminology and methodologies used within the discipline.	Students demonstrate competence in the terminology, concepts, methodologies and theories used within the discipline.
COMMUNICATION	Communication is the development and expression of ideas in written and oral forms.	Students communicate knowledge, ideas, and reasoning clearly and effectively in written or oral forms appropriate to the discipline.
CRITICAL THINKING	Critical thinking is characterized by the comprehensive analysis of issues, ideas, and evidence before accepting or formulating an opinion or conclusion.	Students analyze information carefully and logically from multiple perspectives, using discipline specific methods, and develop reasoned solutions to problems.

PHYSICAL SCIENCE GENERAL EDUCATION PROGRAM OBJECTIVES:

Physical science courses provide instruction in the basic concepts, theories and terms of the scientific method in the context of the physical sciences. Courses focus on major scientific developments and their impacts on society, science and the environment, and the relevant processes that govern physical systems. Students will formulate empirically-testable hypotheses derived from the study of physical processes, apply logical reasoning skills through scientific criticism and argument, and apply techniques of discovery and critical thinking to evaluate outcomes of experiments.

These objectives are accomplished through participation in the course lectures and discussion sections, and individual work done on homework assignments and assessments.

Naturally, all three areas of learning outcomes will be assessed in all categories of graded assignment administered in CHM1025.