

# ## CHM2047 FUNDAMENTALS OF THE COURSE

Syllabus might be subject to changes during the semester. For the latest information, visit the [CANVAS site](#).

Designed for entering (not transfer) students who wish to move more quickly into advanced coursework. Electronic structure and bonding, gases, liquids, solids, kinetics, equilibria, acids and bases, thermodynamics, oxidation-reduction.

## TEACHING TEAM

Professor Valeria Kleiman (she/her/ella). e-mail: [kleiman@ufl.edu](mailto:kleiman@ufl.edu)

To meet with Dr Kleiman see the table below or by appointment.

We have a FANTASTIC Graduate Assistant:

Deep Bera	<a href="mailto:s.bera@chem.ufl.edu">s.bera@chem.ufl.edu</a>
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In addition, five "peer mentors" will help lead class breakout rooms and Wednesday discussion sessions. The peer mentors are students who successfully completed CHM2047 last Fall. Not only did they come out in the top of their class; THEY WERE ALSO RECOMMENDED FOR THIS POSITION BY THEIR PEERS. Having taken the class last fall, they are very attuned with the fast pace and demands of this course.

<b>Aiden Fong</b>	<a href="mailto:aidenfong@ufl.edu">aidenfong@ufl.edu</a>
<b>Alyse Gomez</b>	<a href="mailto:alysegomez@ufl.edu">alysegomez@ufl.edu</a>
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<b>Yell NewHall</b>	<a href="mailto:yellnewhall@ufl.edu">yellnewhall@ufl.edu</a>
<b>Casey Sun</b>	<a href="mailto:suncasey@ufl.edu">suncasey@ufl.edu</a>

## CLASS and OFFICE HOURS

OFFICE HOURS might change after the first week of classes. Please check back to confirm they are available. Prof. Kleiman and all TAs are available to help students in any of the five sections. You are not limited to only the TA assigned to your section, you are encouraged to go to multiple office hours to help the learning process. **Office hours are held in CBB Room 203**

Period time	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
02 8:30 -9:20			<b>UST105 Casey</b>		
03 9:35- 10:25		Lecture Kleiman & Teaching Team CBB221	<b>UST105 Adriana</b>	Lecture Kleiman & Teaching Team CBB221	<b>Yell</b>
04 10:40-11:30	<b>Deep</b>	VDK CLB311B	<b>Lei 242 Yell</b>	<b>Casey</b>	
05 11:45- 12:35			<b>UST105 Aiden</b>		
06 12:50- 1:40	<b>Alyse</b>				
07 1:55 - 2:45		<b>TBA</b>	<b>Adriana</b>	<b>Aiden</b>	<b>Alyse</b>
08 3:00 - 3:50	<b>Deep</b>	<b>Yell</b>			
09 4:05 - 4:55				<b>Deep</b>	<b>Casey</b>
10 5:10- 6:00	<b>Aiden</b>	<b>Adriana</b>			
11 6:15-7:05					

## PREREQUISITES

AP, IB, AICE, (Chem and Math) or dual enrollment chemistry courses with credit for CHM2045/L CHM2046/L; Coreq: CHM 2047L. Students are expected to have a solid grasp of pre-calculus algebra and trigonometry and should either be co-registered for MAC2311 (Calc.1) or have credit for it. During lectures, concepts from Calculus may be discussed but will not appear on exams. When derivatives or integrals are mentioned, the focus is primarily on their graphical interpretation to aid understanding of chemical or physical concepts. When homework problems require their use, feel free to employ computational solvers such as Wolfram Alpha: <http://www.wolframalpha.com/> (Links to an external site.).

## TEXTBOOK

Trying to make the college experience more accessible I created an online FREE BOOK for this class. This book has been designed following the syllabus of CHM2047. The book is part of Open Education Resources and can be accessed within the Libtext Library: [CHM2047 BOOK](#) Reading assignments ought to be completed before coming to class to allow for better comprehension of the material during lecture.

## GRADES

Grades are based on your own performance, as **is independent of your classmate's work**. The final grade is an evaluation of how much you've learned and achieved in regard to the course goals. The course grade is a combination of your effort and achievements in several activities and the grading scheme corresponds to the final letter grade in the class.

A student contending that a HW, exam or quiz has been miss-graded or miss-scored must report this to the TA responsible for grading within one week of receiving the original grade or score. Failure to follow this policy results in no reconsideration of the contended grade or score. For all questions on grades or grading, please consult with the cognizant TA first. If this does not resolve the issue you may talk to Professor Kleiman.

Activity	Contribution to grade
Think Aloud Videos	25 %
Video Quizzes	10 %
HW	35 %
Participation	15%
Creative Project	15%

Please note that a 'C-' is not considered a passing grade for majors requiring a General Chemistry course. See <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx> for more info on UF grade policies.

## UF GUIDING POLICIES

- In response to COVID-19, the following recommendations are in place to maintain your learning environment, to enhance the safety of our in-classroom interactions, and to further the health and safety of ourselves, our neighbors, and our loved ones.
  - If you are not vaccinated, get vaccinated. Vaccines are readily available and have been demonstrated to be safe and effective against the COVID-19 virus. Visit [one.ufl.edu](https://one.ufl.edu) for screening / testing and vaccination opportunities.
  - If you are sick, stay home. Please call your primary care provider if you are ill and need immediate care or the UF Student Health Care Center at 352-392-1161 to be evaluated.
  - Course materials will be provided to you with an excused absence, and you will be given a reasonable amount of time to make up work.
- **Contact Hours:** "Contact Hours" refers to the hours per week in which students are in contact with the instructor, excluding office hours or other voluntary contact. Often, the number of contact hours in this course equals the number of credits the course offers.
- **Workload:** As a Carnegie I, research-intensive university, UF is required by federal law to assign at least 2 hours of work outside of class for every contact hour. Work done in these hours may include reading/viewing assigned material and doing explicitly assigned individual or group work, as well as reviewing notes from class, synthesizing information in advance of exams or papers, and other self-determined study tasks.
- **Accommodation for Student with Disabilities:** Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting <https://disability.ufl.edu/students/get-started/>. This class supports the needs of different learners; it is important for students to share their accommodation letter with their instructor and discuss their access needs as early as possible in the semester.
- **Counseling Services:** The University of Florida provides counseling services for students, staff, and faculty. See <http://www.counseling.ufl.edu/cwc/> (Links to an external site.). If you or a friend are in distress, call (352) 392-1575 (available 24/7), email [umatter@ufl.edu](mailto:umatter@ufl.edu), or walk in for an emergency consultation during regular service hours (8:00am – 5:00pm) at the Radio Road Site, 3190 Radio Rd., or the Peabody Hall Site, on the 4<sup>th</sup> floor of Peabody Hall, adjacent to Criser Hall. For other hours or weekends, call the Alachua County Crisis Center, (352) 264-6789. For sexual assault recovery services call the Student Health Care Center at (352) 392-1161. For life-threatening emergencies always call 911.
- **Teaching Evaluations:** Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available from [the Gatorevals website \(Links to an external site.\)](#). Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via [the evaluation system. \(Links to an external site.\)](#) Summaries of course evaluation results are available to students at the [public results website \(Links to an external site.\)](#).
- **Course Recording:** Pursuant to Florida House Bill 233, which you can see [here](#), please note the following:

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third-party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

## CHM2047 ACTIVITES & ASSIGNMENTS

This class uses different environments to learn chemistry. All activities and assignments have been designed to maximize student/instructors and student/student interactions. A combination of in-class and out-of-class assignments provides a more meaningful environment to understand new material and to demonstrate proficiency.

### ATTENDANCE

Attendance to class-time and discussions is fundamental to understand the material and engage with the instructor and other students. Attendance to lectures, discussion and office hours, though not required, it is expected. The 2-period class (T and R) will combine a discussion of the pre-viewed video, with group work solving problems. Watching the **pre-recorded lectures** and **reading the book** BEFORE lecture time is paramount to keep up with the fast pace of the course.

According to UF regulations, in addition to the 5 hrs class a week, a minimum of 10/week of reading, homework and general study are required. Repeated absence in class and discussion session will make it very difficult to earn full participation points, but more importantly, the one-semester Gen Chem course has a fast pace making it imperative to stay on task, otherwise it becomes very hard to catch up on the missed material. For this reason Attendance is graded as part of the engagement rubric (see below).

[\(Links to an external site.\)](#)

### ENGAGEMENT 15%

In order to engage with the course material and your classmates, active participation is expected at all class sessions. Furthermore, because each class discusses material from the pre-recorded videos it is imperative that students be ready to participate in every lecture, in every discussion session and when attending office hours.

Rather than attempting to quantify an arbitrary “class participation” construct, in this class you will be assessed on any and all demonstrations of your willingness and ability to engage with the course material, with your classmates, with the Teaching Assistants and with your professor. Evidence of engagement can take many formats, and it is evaluated during lectures, discussion and office hours. (If you do not attend lectures, discussions and OH, you cannot demonstrate evidence of engagement.) It includes all ranging from (but by no means limited to):

- Offering thoughts and reactions to the videos
- Asking questions in or out of class
- Solving problems during class and during discussion sessions
- Treating classmates, colleagues, professors with respect
- Visiting office hours
- Sharing additional readings or resources with classmates
- Offering assistance/guidance/advice to your classmates

We will keep track of your Engagement throughout the semester, with grades assigned approximately every three weeks, following this [RUBRIC](#)

## **HOMEWORKS 35%**

They are assigned weekly and, in most cases, the deadline for submission is one week after assignment. Late HW policy: HW is late if it is not uploaded by the deadline. Each day late will incur a 20% deduction of the total points value. Do your HW! By doing HW problems you will be better prepared to deal with problems on exams. If it's deadline time and you have not finish the HW, submit it anyway. You will get feedback on the problems you solved and you will get partial credit! HW problems come from multiple sources, including the instructor's own personal list of problems. Since these will be the hardest problems you will encounter in CHM2047, we encourage you to form study groups with other students to work on them. **However, simply copying someone else's work is plagiarism and will be treated as such!** Sometimes you will find the solutions to the HW online. Copying these solutions without your own intellectual contribution will not only remove points from your grade (plagiarism) but will be detrimental to your understanding of the material and preparation for the exams.

Submission of HW: HW are submitted ONLINE as a single pdf file. A **high quality** picture of your HW can be used to create the compiled pdf file. You can use free apps (like CamScanner) or go to the Martson Library, where scanners are available for free. Give yourself some extra time to go through the pdf creation and submission procedure. Multiple-file or unreadable submissions will be returned to the student ungraded.

Each week a number of problems will be used for additional evaluation (see "Think Aloud Videos").

## **On-Line QUIZZES 10%**

There will be multiple (almost one per lecture) on-line (CANVAS) quizzes. Quiz duration varies and some of them (not all) may be taken twice with the best result counting toward your grade. Quiz answers must be your own, not shared with other students.

## **THINK ALOUD VIDEO 25%**

Think aloud videos will be used to evaluate proficiency. Several times during the semester problems from the HWs will be selected and students will prepare an individual video on how to solve those HW problems.

The task is to create a short video explaining how to solve the HW problems as if you are teaching someone who doesn't know what to do. During the semester you will prepare 3 of these videos.

## CREATIVE PROJECT 15%

This semester we will explore Chemistry with a creative project.

The objective of this project is for you to communicate your understanding of a topic within our General Chemistry material to someone outside the class (a science student with no chem background or a non-scientist with some interest in chemistry). Once you pick a topic to develop, use your creativity to design something that explains this concept. The Evaluation will be mostly based on your ability to summarize and convey a course topic creatively, effectively and accurately. To complete the assignment, you will submit your product and a less than 1-page long summary that describes the course concept covered and/or how your project relates to the course content.

## FINAL EXAM

This course does not have in-class exams.

Final exam: If a student is happy with their grade at the end of the semester, they may skip it. Since the final exam is cumulative, the instructor reserves the right to consider assigning a letter grade above that which the student would receive based strictly on total points earned. This will only take effect if the final exam is taken and the performance on the final exam is significantly above the student's overall performance for the semester, and if the student shows clear improvement in their exam grades over the course of the semester.

## ADDITIONAL RESOURCES

**Students with Disabilities:** Students requiring special accommodations should register with the Dean of Students Office (<http://www.dso.ufl.edu/> (Links to an external site.), 352-392-1261) and the Disability Resource Center (DRC, <https://www.dso.ufl.edu/drc> (Links to an external site.), 352-392-8565, email: [accessUF@dso.ufl.edu](mailto:accessUF@dso.ufl.edu)), and present documentation from that office to the instructor.

**Counseling Services:** The University of Florida provides counseling services for students, staff, and faculty. See <http://www.counseling.ufl.edu/cwc/> (Links to an external site.). If you or a friend are in distress, call (352) 392-1575 (available 24/7), email [umatter@ufl.edu](mailto:umatter@ufl.edu), or walk in for an emergency consultation during regular service hours (8:00am – 5:00pm) at the Radio Road Site, 3190 Radio Rd., or the Peabody Hall Site, on the 4<sup>th</sup> floor of Peabody Hall, adjacent to Criser Hall. For other hours or weekends, call the Alachua County Crisis Center, (352) 264-6789. For sexual assault recovery services call the Student Health Care Center at (352) 392-1161. For life-threatening emergencies always call 911.

**Emergency Numbers and Web Sites** UFPD (UF Police Department): In case of emergency dial 911. The UF campus police non-emergency number is (352) 392-1111. Their web site: <http://www.police.ufl.edu/> (Links to an external site.),

UF Emergency management: (352) 273-2100. <https://emergency.ufl.edu/> (Links to an external site.),

Infirmery (student health center): (352) 392-1161, <http://shcc.ufl.edu/> (Links to an external site.).

EH&S (Environmental Health & Safety): (352) 392-1591, <http://www.ehs.ufl.edu/> (Links to an external site.).

*Other Academic Resources UF provides several other resources for students, such as*

**Library Support** can be obtained here: <http://cms.uflib.ufl.edu/ask> (Links to an external site.), where you can find various ways to receive assistance with respect to using the libraries or finding resources.

**The Career Resource Center** is located on level One in the Reitz Union, (352) 392-1601, and provides career assistance and counseling. Refer to <http://www.crc.ufl.edu/> (Links to an external site.) for further info.

**The Teaching Center** is located in Broward Hall, main phone (352) 392-2010 or appointment phone (352) 392-6420, and provides students with tutoring services and counseling regarding general study skills. Refer to <http://teachingcenter.ufl.edu/> (Links to an external site.) for further info. It may also provide employment opportunities as tutors for well qualified students.

**The Writing Studio** is located at 302, Tigert Hall, (352) 846-1138, and provides help with brainstorming, formatting, and writing papers, see: <http://writing.ufl.edu/writing-studio/> (Links to an external site.).

**The Ombuds Office** is located at 31 Tigert Hall, (352) 392-1308, and provides students assistance in resolving problems and conflicts that arise in the course of interacting with the University of Florida. By considering problems in an unbiased way, the Ombuds works to achieve a fair resolution and works to protect the rights of all parties involved. For further information go to <http://www.ombuds.ufl.edu/> (Links to an external site.) or refer to the official complaints policy here: [https://www.dso.ufl.edu/documents/UF\\_Complaints\\_policy.pdf](https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf) (Links to an external site.).

## ADDITIONAL INFO

**Cell Phone Etiquette:** Please put all cell phones or other electronic devices on “**silent mode**” during all class and discussion periods. Please do not leave the classroom during lecture to make a phone call, use the 5-minute break. Use your cellphone only for class activities while class is in session. Thank you!

**Honor Code** This class will operate under the policies of the student honor code which can be found at: <https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/> (Links to an external site.). The students, instructor, and TAs are honor-bound to comply with the Honors 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. 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: <https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>