

CHM2051 — Honors General Chemistry II — Spring 2022
Class #s 25195, 25196, 29858, 29863

Credits: 3; Prereq: MAC 1147 or the equivalent, and a minimum score of 'B+' in CHM2045 (or the equivalent CHM2050 and CHM2095).

Honors version of the second semester of the General Chemistry sequence, 1st semester – CHM2045/2050/2095 + CHM2045L/2096L, 2nd semester – CHM2046/2051/2096 + CHM2046L/2096L. This course is open to students with superior performance in CHM2045 or its equivalents. It covers acids and bases, aspects of chemical equilibrium, thermodynamics, electrochemistry, complex ions, descriptive chemistry, and instructor-chosen topics. (P)

Instructors	Dr. Alexander Angerhofer (Dr. A)	Dr. Daniel Talham
Phone	392 0541 (office, LEI214A)	392 9016 (office, CLB412A)
E-mail	alex@chem.ufl.edu	talham@chem.ufl.edu
O.H.	T-8, W-9, R-4 periods f2f ¹ and by apt.	M 2-4pm, F 11am-12pm f2f ¹ and by apt.

Grad. TAs	Michael Christopher (m.christopher@ufl.edu), OH: M-9, T-2, F-4 period on Zoom.*
	Zain Becerra (zbecerra@ufl.edu), OH: T-10, W-10, F-6 on Zoom.*
TAs	Mauli Bhogade (mauli.bhogade@ufl.edu), OH: W-3, R-8 on Zoom.*
	Lindsey Brinkley (lbrinkley@ufl.edu), OH: W-5, R-7 on Zoom.*
	Anneliese Collin (anneliesecollin@ufl.edu), OH: M-4, R-2 on Zoom.*
	Emily DeGrange (e.degrange@ufl.edu), OH: T-4, R-6 on Zoom.*
	Sabrina Guillen (sabrinaguillen@ufl.edu), OH: M-7, R-8 on Zoom.*
	Rachel Levi (rachel.levi@ufl.edu), OH: M-2, W-6 on Zoom.*
	Puja Mudam (puja.mudam@ufl.edu), OH: M-8, F-5 on Zoom.*
	Wade Munger (wade.munger@ufl.edu), OH: T-3, R-6 on Zoom.*
	Sarah Paprotna (sarahpaprotna@ufl.edu), OH: M-6, W-7 on Zoom.*
	Malhar Patel (malharpatel@ufl.edu), OH: M-5, W-8 on Zoom.*
	Jackson Pugmire (j.pugmire@ufl.edu), OH: T-6, W-4 on Zoom.*
	Aryeh Silver (asilver1@ufl.edu), OH: M-3, R-10 on Zoom.*
	Mel Soto (soto.m@ufl.edu), OH: R-5, F-6 on Zoom.*
	Emma Thomas (emma.thomas@ufl.edu), OH: T-5, R-5 on Zoom.*
	Jason Veizaj (jveizaj@ufl.edu), OH: T-9, R-10 on Zoom.*
Megan Wisniewski (megan.wisniewski@ufl.edu), OH: T-7, R-7 on Zoom.*	

*Zoom office hours will take place during the indicated periods at <https://ufl.zoom.us/j/96320318806>.

Class Meeting Times ²	TR2–3 periods, 8:35am–10:20am in Flint Hall 50 (Angerhofer) TR4–5 periods, 10:45am–12:30pm in Leigh Hall 207 (Talham)
Holidays	01/17 (MLK Day), 03/07 – 03/11 (Spring Break), 04/21–22 (Reading Days, no classes).
Class Text	https://openstax.org/details/books/chemistry-atoms-first-2e . Chemistry: Atoms First 2e by OpenStax. ISBN: 978-1-947172-63-0. This text is recommended. In addition, any reasonably recent General Chemistry textbook should be fine for you to review and look up material.
Homework	Homework will be assigned weekly except during weeks of during-term exams. Homework will be graded.
% Earnable ³	Best 3 of 4 exams (3 during-term, 1 final) @ 25% each, for 75% of final grade. 10 homeworks @ 1% each, for 10% of final grade Pre-lecture and in-class participation (learning catalytics) @ 9% of final grade. Team projects @ 6% of final grade. Total earnable percentage 100%. ⁴

1 f2f = face-to-face (in person, *i.e.*, not online)

2 See additional information under #2 on page 4 of this syllabus.

3 Total earnable points = 1000 which corresponds to 100%. Each point earned through exams, participation, or team projects counts as 0.1% toward your grade. HW points will be prorated to 10% of final grade.

Grading Scheme ⁵	A: $\geq 85\%$, 82.4% > B+ $\geq 80.0\%$, 74.9% > B- $\geq 72.5\%$, 69.9% > C $\geq 65.0\%$, 62.4% > D+ $\geq 60.0\%$, 54.9% > E.	84.9% > A- $\geq 82.5\%$, 79.9% > B $\geq 75.0\%$, 72.4% > C+ $\geq 70.0\%$, 64.9% > C- $\geq 62.5\%$, 59.9% > D- $\geq 55.0\%$,
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Course Schedule (tentative):

Date	Day	Chap.	Topic	Reading
01/06/22	R		Disc. of Syllabus and brief review of General Chemistry 1	
01/11/22	T	12	Thermodynamics, Spontaneity, Entropy, and Microstates	pp. 657 – 667
01/13/22	R	12	2 nd and 3 rd Law of Thermodynamics, Work, Gibbs Free Energy, Rxn Direction	pp. 667 – 676
01/18/22	T	13	Chemical Equilibrium, Definitions, Law of Mass Action, Equilibrium Constant, Homogeneous/Heterogeneous Equil.	pp. 685 – 697
01/20/22	R	13	Le Châtelier's Principles, Effects of Concentration, Pressure, and Temperature Changes, Direction of Change	pp. 698 – 715
01/25/22	T	14	Acid/Base Definitions and Equilibria	pp. 729 – 730
01/27/22	R	14	pH, pOH, pK _a , pK _b , Relative Acid/Base Strengths, Quantitative Analysis Molecular Structure, Binary/Ternary Acids, Graphical Analysis	pp. 731 – 759
02/01/22	T	14	Hydrolysis of Salts, Polyprotic Acids, Buffers, Titrations, Indicators, Applications	pp. 759 – 775
02/03/22	R	12–14	Jeopardy I, exam review	
02/08/22	T	12–14	Exam #1	
02/10/22	R	14	Buffers, Titrations, Indicators	
02/15/22	T	15	Precipitation Equilibria, Lewis Acid/Base Chemistry	pp. 789 – 813
02/17/22	R		Atmospheric Chemistry (AC), composition, upper atmosphere, ozone chemistry, CFCs and their implications	ARM ⁶
02/22/22	T		The greenhouse effect, CO ₂ and other greenhouse gases	ARM
02/24/22	R		Acid rain, NO _x and SO _x chemistry	ARM
03/01/22	T	16	Electrochemistry, redox rxns, electrochemical cells, half-rxns, electrical work, standard cell potential	pp. 827 – 841
03/03/22	R	16	Equilibrium, Free Energy, Nernst Equation, Batteries, Fuel Cells	pp. 841 – 852
03/15/22	T	15, 16, AC	Jeopardy II, exam review	
03/17/22	R	15, 16, AC	Exam #2	
03/22/22	T	19	Transition metals, Coordination Chemistry	pp. 1027 – 1057
03/24/22	R	19	Crystal Field Theory, Spectroscopy, Magnetism	pp. 1057 – 1066
03/29/22	T	20	Nuclear Chemistry, Nuclear Structure and Stability, Nuclear Reactions	pp. 1075 – 1085
03/31/22	R	20	Radioactive Decay, Radiometric Dating, Transmutation and Energy	pp. 1086 – 1111
04/05/22	T	20	Uses of Radioisotopes, Biological Effects	pp. 1112 – 1125
04/07/22	R	21	Organic Chemistry, Types of Organic Molecules, Nomenclature, Lewis Structures	pp. 1137 – 1175
04/12/22	T	21	Classes of Organic Rxns, Functional Groups, Properties, Reactivities, Curved Arrow Notation	pp. 1137 – 1175
04/14/22	R	19–21	Jeopardy III, exam review.	
04/19/22	T	19–21	Exam #3	
04/25/22	M		Comprehensive Final Exam (Optional) 10:00am – 12:00pm	

4 DTEs and HW will carry extra bonus questions which makes it possible to earn >100%.

5 see <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx> for more info on UF grade policies.

6 ARM = additional reading material supplied by the instructor.

SPRING 2022				SCHEDULE CARD							
UNIVERSITY OF FLORIDA											
				NAME: TA office hours							
				Univ. Address:							
				Univ. Phone:							
Per.	Hour	Monday	Bldg/Rm #	Tuesday	Bldg/Rm #	Wednesday	Bldg/Rm #	Thursday	Bldg/Rm #	Friday	Bldg/Rm #
1	7:25-8:15										
2	8:30-9:20	Rachel	zoom	Michael	zoom			Anneliese	zoom		
3	9:35-10:25	Aryeh	zoom	Wade	zoom	Mauli	zoom				
4	10:40-11:30	Anneliese	zoom	Emily	zoom	Jackson	zoom			Michael	zoom
5	11:45-12:35 p	Malhar	zoom	Emma	zoom	Lindsey	zoom	Emma, Mel	zoom	Puja	zoom
6	12:50-1:40	Sarah	zoom	Jackson	zoom	Rachel	zoom	Emily, Wade	zoom	Mel	zoom
7	1:55-2:45	Sabrina	zoom	Megan	zoom	Sarah	zoom	Lindsey, Megan	zoom	Zain	zoom
8	3:00-3:50	Puja	zoom			Malhar	zoom	Mauli, Sabrina	zoom		
9	4:05-4:55	Michael	zoom	Jason	zoom						
10	5:10-6:00			Zain	zoom	Zain	zoom	Aryeh, Jason	zoom		
11	6:15-7:05										
E-1	7:20-8:10										
E-2	8:20-9:10										
E-3	9:20-10:10										
Comments: Zoom office hours will be at: https://ufi.zoom.us/j/96320318806 .											

Further Important Information:

- 1. Overview and Goals:** CHM2051 is the second in a double course series introducing the student to General Chemistry. The goals of the course are to give an overview of basic chemistry, specifically thermodynamics, equilibrium phenomena such as acid/base and solubility equilibria, electrochemistry, and a brief introduction into organic and inorganic chemistry. The course allows the instructor to enrich the curriculum with additional topics of current interest. The course is designed to prepare the student for subsequent work (Organic Chemistry I).
- 2. Class Meeting Times and Instructors:** The course is split into four sections. Two sections (class numbers 25195 and 25196) meet TR2–3 periods in FLI050 and are taught by Dr. Alexander Angerhofer (Dr. A). The other two sections (class numbers 29858 and 29861) meet TR4–5 periods in LEI207 and are taught by Dr. Daniel Talham. There are no recitation sessions and practice problems will be worked in class at the discretion of the instructors. Since we have double–block periods the meeting times will be organized as follows: We will start 5 minutes late, 8:35 am for the TR2–3 sections and 10:45am for the TR4–5 sections, respectively. A 5-minute break will be taken whenever the flow of the lecture allows, *i.e.*, may not be exactly in the middle of a two-period block. Class ends ~5 minutes early, *i.e.*, 10:20 am for the TR2–3 sections and 12:30pm for the TR4–5 sections, respectively.
- 3. Honors:** This course is reserved for students who performed at a high level in CHM2045 (or the equivalent), demonstrated by a minimum of a ‘B+’ grade by the end of the fall 2021 term. The course is organized around a smaller classroom environment more conducive to an interactive teaching style. While we will cover the same topics as CHM2046, often to a deeper level, we will spend a little more time discussing topics that are important to real life applications of chemistry. That means less time will be allotted to drills. Students are expected to spend significant amounts of time outside the classroom to work on problem solving skills. Homework sets will contain long-response problems that focus on understanding the material and students are encouraged to form study groups to work together on these problem sets. Our class will use the ‘Learning Catalytics’ site for in-class participation as well as pre-lecture questions.
- 4. General Chemistry Learning Objectives:** The course will provide instruction in the basic concepts, theories, and fundamental terms of chemistry. At the very core of chemistry is the concept of the atom, its structure, including its nuclear make-up, and chemical bonding with other atoms. Understanding the atom provides a conceptual foundation for the many aspects of ‘macroscopic’ chemistry which will be the focus of this course such as thermodynamics, and equilibrium phenomena. CHM2051 leaves space for topics to enrich the chemistry curriculum and we will use this to discuss atmospheric chemistry with its many challenges and opportunities. Given that CHM2051 serves as preparation for higher level chemistry courses, a brief introduction to organic chemistry and inorganic chemistry will be given as well. The key to success in this course is understanding the material rather than memorizing it. Major scientific developments will be reviewed and their impacts on society, science, and the environment examined. With what they learn students will be able to: (1) formulate empirically testable hypotheses relevant to the study of physical and life processes, (2) use logical reasoning skills through scientific criticism and argument, and (3) apply techniques of discovery and critical thinking to predict and evaluate outcomes of experiments. Upon successful completion of CHM2051 each student will:
 - have a working knowledge of the basic concepts, theories, and fundamental terms of Chemistry that are outlined under 1), and understand the relevant processes that govern chemical systems,
 - grasp the major scientific developments that have led to the current state-of-the-art in the field,
 - be able to assess impacts Chemistry has on society, science, and the environment,
 - be familiar with and capable of using the scientific method when discussing scientific facts as they relate to Chemistry,
 - know how to formulate empirically testable hypotheses derived from the study of physical and chemical processes,
 - use logical reasoning skills through scientific criticism and argument, and apply techniques of discovery and critical thinking to predict and evaluate outcomes of experiments.To achieve these objectives students are required to participate in all class activities, specifically:
 - Regular attendance of lectures in which the course material will be discussed and demonstrated. This is essential for success in the course. Lecture attendance requires active participation on the students' part. Large sections of class time will be spent in scientific dialog between teacher and students where we will practice the art of scientific reasoning.
 - Weekly graded homework assignments typically include conceptual and numerical problems that require the student to apply the learned concepts to specific examples. Problems are taken from different areas of experimental and theoretical chemistry including physical and life processes. Homework problems may also include reading material, typically a topically related original research article requiring the student to summarize and comment on in their own words.
 - Three mid-term exams will be administered throughout the semester. These exams will be worked-out long-response exams, not multiple choice. Emphasis is placed on testing the students' reasoning skills and their understanding of the material rather than rote memorization

of facts. On their exams, students will receive all pertinent equations.

- Participation points are available to students throughout the semester and can be earned during the lectures by answering ‘learning catalytics’ questions (for more information see below item #10). Additional points will be earned by participating in team exercises, *i.e.*, preparing and competing in three jeopardy-style games in preparation for the three during-term exams.
- 39 weekly office hours are offered by instructors and TAs, conveniently spread out over the whole week. Students are strongly encouraged to seek help and feedback on all concepts and problems encountered in class. While office hour attendance is completely voluntary, it is an important activity that will help solidify students' understanding of the material and make them successful in the course.

5. **Math Requirements:** Students are expected to have a solid grasp of pre-calculus algebra and trigonometry and need to show credit for MAC1147 (college-level algebra with trigonometry) on their transcripts. During lectures, concepts from Calculus may be briefly 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/>.

6. **Exam Policies:** Three during-term exams will be given (see schedule above). These exams will be conducted during class periods. Exam duration will be 115 minutes max. The final exam is cumulative and amounts to the same number of points as a during term exam. It is optional since the lowest-scoring out of the four exams is dropped. For exams you must use a non-graphing non-programmable scientific calculator with log, ln, root, and exponent (scientific notation) functions. Be sure to also bring pen or pencils and bring your UF ID card. Remember your section number and team element. In this course you are permitted to use a letter-sized sheet of paper with your own hand-written notes in all exams. No other notes, papers, cell phones, or other electronic devices can be in view during exams. University examination and reading day policies can be found at: <https://catalog.ufl.edu/UGRD/academic-regulations/examination-policies-reading-days/>. **Exam Absences:** will be handled in accordance with official UF academic regulations. For more information, see <https://catalog.ufl.edu/UGRD/academic-regulations/>. See below for further clarification for two different types of situations.

(1) Conflicts with other events: Acceptable reasons to miss a scheduled exam include conflicting evening exams in courses with higher course numbers (not applicable here because our exams are during class time), religious holidays, military obligations, special curricular requirements (*e.g.*, attending professional conferences), or participation in official UF-sanctioned activities such as athletic competitions, *etc.* For more information on such absences see the official UF Policy at <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/#absencestext>. If you must be absent for an exam due to a documented and approved conflict known in advance, you need to e-mail your instructor the documentation at least *one week prior* to the scheduled exam and an early conflict exam will be scheduled for you.

(2) Missing an exam due to an emergency or sudden illness: If you are absent for an exam due to an unpredicted documented medical reason or family emergency, you must contact the instructor as soon as possible, and you may be asked to have your excuse verified by the Dean of Students Office (DSO). Your instructor will follow UF academic regulations in evaluating the notification and/or documentation received by you or by the DSO on your behalf. Once your instructor is satisfied with the validity of your exam absence a make-up exam will be scheduled after a reasonable amount of time, *i.e.*, before the end of the semester. If your documentation is deemed insufficient to excuse your absence you will receive a zero on the missed exam.

To alleviate the stress of potential issues that do not fall under officially-sanctioned absences, we have incorporated an “*average/replace*” policy (the lowest of the three progress exams will be replaced by the average of the three progress exams). This “*average/replace*” policy will help to minimize the impact of a single poor performance but it will not completely disappear.

Exam Grade Disputes: Any and all exam grade disputes must be dealt with within two weeks of the scheduled exam date. This rule also applies to HW grades.

7. **Canvas:** Access your Canvas e-learning account by clicking on the ‘Log-In to E-Learning’ link on the web site, <http://lss.at.ufl.edu/> where you will have to supply your Gatorlink credentials to log in. Please, do this at your earliest convenience and make yourself familiar. Canvas will be primarily used by TAs and the instructor to communicate with the class. Please make sure to monitor the announcements on a regular basis. If you experience technical problems when using Canvas, please contact the UFIT helpdesk (<http://helpdesk.ufl.edu/>, 352-392-4357 M-F from 8:00 am till 5:00 pm, email helpdesk@ufl.edu or learning-support@ufl.edu).

8. **Homework (HW):** Ten HW assignments will be given over the course of the semester. They will normally be published on Canvas by Thursday afternoon and are due the following week on Friday morning at 8:00 am as a pdf file (scan of your work) on canvas, *i.e.*, you have a little more than a week to complete your assignments. Late HW policy: HW is late if it is not delivered by the stated deadline. Each day late will incur a 20% deduction of the total points value. Do your HW! By doing HW problems you will collect essential points toward your grade and will be better prepared to deal with problems on exams. Do your homework early! This will allow you to communicate with

fellow students and give or receive corrections. HW problems come from many different sources, including the instructors' own personal lists of problems. Since these will be the most challenging problems you will encounter in CHM2051, you may 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! (see <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>).

9. **Participation Grade:** Participation points (up to 9% of your total grade) will be earned through active participation using 'learning catalytics.' This is primarily done with your digital wifi-enabled device (smartphone, tablet, notebook PC, *etc.*) to respond to questions asked by the instructor throughout the lectures (see further explanation below under #10). There will also be learning catalytics pre-lecture assignments which will be due before class starts. They pertain to the reading assignments (see schedule on page 2) and will typically be available a full day before a lecture. Please note that the total LC points that can be achieved will only be known by the end of the semester. To achieve 100% of the participation grade (9% of your final grade) you need to answer 75% of all LC questions correctly.
10. **LearningCatalytics (LC):** In this course, we will use LC for your digital device to respond to the instructor's questions and earn valuable points toward your grade. You will need to purchase access and create a student account on <https://learningcatalytics.com/>. Follow instructions on that web site, or in the registration document on your Canvas account (click on Files → LC → Get Started-Flyer_Learning_Catalytics.pdf) to activate your account and link it to our course, CHM2051. When registering make sure to use your full first and last name with correct spelling including capitalization. This is important for your instructor to correctly link your LC gradebook entry to your course grades on Canvas. Do not register twice! If you have trouble logging in, get in touch with Pearson's help desk online at <https://support.pearson.com/getsupport/s/contactsupport>. The cost for LC is \$12 for the semester. You are required to bring at least one wifi-enabled digital device to class to use for this activity. If you don't have access to a digital device, please contact the instructor.
LC questions will be assigned as the semester progresses and the total number is not yet known. A minimum of 75% of all available LC points are required to achieve 100% of the earnable participation points (90 for 9% of your final grade). If you finish the semester with less than 75% of the available LC points your participation points will be calculated by the formula $x(90/75)$ where x = percentage of LC points earned during the semester. For example, if Nigel (a fictitious student) earns 60% of the available LC points his total participation points amount to $60(90/75) = 72$ which counts for 7.2% toward his final grade in the class.
11. **Team Projects:** The students in the class will be divided into six teams, each with its own element name. Each team will participate in three "Jeopardy" games. For each of these games, two groups will be responsible for coming up with the questions while the other four groups compete. The members of each team will receive points for their participation in these games ($3 \times 20 = 60$ points or 6% of final grade). The "Jeopardy" games will be a valuable tool for your exam preparation.
12. **Calculators:** You must have your own scientific calculator. Calculators may be used on homework and exams but may not be shared during exams. You may **not** use graphing calculators or any calculators that are capable of communication on any exam. Simple inexpensive scientific calculators such as the TI-30 series or the Casio fx-260 are acceptable and sufficient for any problem encountered on exams.
13. **Class Attendance:** Regular attendance is essential for your success in this class. However, we will not do roll-calls. Repeated absence in class will make it very difficult to earn full participation points. For further information on UF's attendance policies which are in effect for this course, see: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx> .
14. **Study Habits:** The course demands on average 10 – 12 hours/week of work outside of class. The class will not be taught 'by the book.' It is expected that you read the assigned pages from the textbook (or corresponding chapters in comparable textbooks) in advance before coming to class. Pre-lecture assignments on LC will focus on the most important points in the reading assignments and can be done at your own pace. The instructor will build on this material and you are expected to be able to follow in-class discussion. The course demands a regular sustained effort throughout the semester. Most importantly, **do not allow yourself to fall behind!** The material builds up and you need to stay ahead of the game. If you find that you are not grasping essential material by reading the textbook and following in-class discussion, **seek help!** Visit your instructors' and/or TAs' office hours, talk to other students in your class, compare notes, form a study group, consult other text books, *etc.*
15. **Study Groups:** It is strongly encouraged to form study groups (within or beyond teams) and meet with them on a weekly basis to discuss course material and to prepare for exams. In this course it is permissible for you to work on HW assignments together with your study partners. However, you are responsible to fully understand your own worked-out HW submissions and may not just copy someone else's. Not understanding HW problems will haunt you on exams.
16. **Office Hours:** The two instructors, two graduate TAs, and 16 undergraduate TAs offer a total of 39 office hours spread over the week. The detailed times and locations are listed on the first page of this syllabus and the schedule on the third page. Please note that most of the office hours are listed by the class period in which they are taking place (for example R-9 is 9th period on Thursdays).

This is time we set aside for you. Take advantage of it! Please note that the instructors and all TAs are available to help students in any of the courses and their teams. You are not limited to only the TA assigned to your team. Since HW assignments are due on Friday morning, some Thursday office hours will be doubled up with two UGTAs conducting combined office hours to allow for larger amounts of traffic. Most other office hours are set for Mondays and Wednesdays in order to support students with their pre-lecture LC assignments and/or exam preparations. Please note that TA office hours are on zoom at the following link: <https://ufl.zoom.us/j/96320318806>.

17. **COVID-19 Precautions:** This course follows all COVID-related rules in place at UF. Please review UF's student behavior policies regarding COVID-19 for more information: <https://uf.force.com/PolicyHub/s/article/Behavioral-Expectations-in-Response-to-COVID-19>. UF expects all persons in campus buildings to wear a facemask, covering the nose and mouth, to protect themselves and others around them. If you are sick, please do not come to class! Lectures will be videotaped and made available to students. The instructor will work with you so that you are not penalized for missing lectures due to sickness.
18. **Online Course Evaluation:** 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 at <https://gatorevals.aa.ufl.edu/students/>. 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 <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.
19. **Students with Disabilities:** Students with disabilities requesting accommodation should first register with the Disability Resource Center (352-392-8565, <https://disability.ufl.edu/>) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. The student is responsible for scheduling the exam dates with the DRC. Students with disabilities should follow this procedure as early as possible.
20. **Counseling Services:** The University of Florida provides counseling services for students, staff, and faculty. See <http://www.counseling.ufl.edu/cwc/>. If you or a friend are in distress, call 352-392-1575 (available 24/7), email umatter@ufl.edu, or walk in for emergency consultation during service hours (9:00 am – 4:00 pm) at 401 Peabody Hall or 3190 Radio Rd. 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.
21. **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: <https://police.ufl.edu/>,
UF Emergency management: 352-273-2100. <https://emergency.ufl.edu/>,
Infirmary (Student Health Care Center): 352-392-1161, <http://shcc.ufl.edu/>.
EH&S (Environmental Health & Safety): 352-392-1591, <http://www.ehs.ufl.edu/>.
22. **Other Academic Resources:** UF provides several other resources for students, such as
Library Support here: <https://uflib.ufl.edu/find/ask/>, 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 <https://career.ufl.edu/> for further info.
The Teaching Center is located in Broward Hall, call 352-392-2010 or 352-392-6420 and provides students with tutoring services and counseling regarding general study skills. Refer to <http://teachingcenter.ufl.edu/> 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: <https://writing.ufl.edu/writing-studio/>.
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 <https://ombuds.ufl.edu/>
23. **Cell Phone Etiquette:** Please put all cell phones or other electronic devices on “**silent mode**” during all class periods. Please do not leave the classroom during lecture to make a phone call. Use your cell phone only for ‘learning catalytics’ activities while class is in session. Thank you!
24. **Group-Me:** The TAs will set up team group-me groups for easier communication. The class is encouraged to set up a whole-class group-me as well.
25. **Honor Code:** This class will operate under the policies of the student honor code. 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 by abiding by the Student Honor Code.** 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://sccr.dso.ufl.edu/process/student-conduct-code/>.

26. **Disclaimer:** This syllabus represents our current plans and objectives. If those need to change as the semester progresses, then the changes will be communicated to the class clearly during lecture announcements and on canvas and the syllabus will be updated.

We are looking forward to spending the semester with you and introducing you to some of the fundamentals of modern chemistry. If you have further questions, please contact us. Have a great semester!

Sincerely Yours,

Dr. Alexander Angerhofer (Dr. A)

Dr. Daniel Talham