

CHM2051 — Honors General Chemistry II — Spring 2025
Class #s 18074, 18075

Credits: 3; Prereq: MAC 1147 or the equivalent, and a minimum score of 'B+' in CHM2045 (or the equivalent, CHM2050 or CHM2095). Honors version of the second semester of the General Chemistry sequence. It covers acids and bases, aspects of chemical equilibrium, thermodynamics, electrochemistry, complex ions, descriptive chemistry, and instructor-chosen topics. (P)

Instructor	Dr. Alexander Angerhofer (Dr. A)
Phone	392 9489 (office, CLB318A)
E-mail	alex@chem.ufl.edu
O.H.	M–5 period on zoom,* T–4, W–9 periods f2f ¹ , and by appointment.

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

Class Meeting Times	TR2–3 periods, 8:35am–10:20am in Flint Hall 50						
Holidays	01/20 (MLK Day), 03/17 – 03/21 (Spring Break), 04/24–25 (Reading Days).						
Class Text	https://openstax.org/details/books/chemistry-atoms-first-2e . Chemistry: Atoms First 2e by OpenStax. ISBN: 978-1-947172-63-0. Page references refer to the updated web version of the text that can be downloaded here. This text is required and freely available on the internet. In addition, any reasonably recent General Chemistry textbook should be fine for you to review and look up material. A license to 'Learning Catalytics' needs to be purchased for the class.						
Homework	Homework will be assigned weekly except during weeks of during-term exams. Homework will be graded.						
% Earnable ²	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%. ³						
Grading Scheme ⁴	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">A ≥ 85%,</td> <td style="text-align: center;">84.9% > A– ≥ 82.5%,</td> <td style="text-align: center;">82.4% > B+ ≥ 80.0%,</td> </tr> <tr> <td style="text-align: center;">79.9% > B ≥ 75.0%,</td> <td style="text-align: center;">74.9% > B– ≥ 72.5%,</td> <td style="text-align: center;">72.4% > C+ ≥ 70.0%,</td> </tr> </table>	A ≥ 85%,	84.9% > A– ≥ 82.5%,	82.4% > B+ ≥ 80.0%,	79.9% > B ≥ 75.0%,	74.9% > B– ≥ 72.5%,	72.4% > C+ ≥ 70.0%,
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79.9% > B ≥ 75.0%,	74.9% > B– ≥ 72.5%,	72.4% > C+ ≥ 70.0%,					

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

² 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

³ DTEs and HW will carry extra bonus questions which makes it possible to earn >100%.

⁴ see <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx> for more info on UF grade policies.

69.9% > C ≥ 65.0%, 59.9% > D- ≥ 55.0%,	64.9% > C- ≥ 62.5%, 54.9% > E.	62.4% > D+ ≥ 60.0%,
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Course Schedule (tentative):

Date	Day	Chap.	Topic	Reading
01/14/25	T		Disc, of Syllabus and brief review of General Chemistry 1	
01/16/25	R	12	Thermodynamics, Spontaneity, Entropy, and Microstates	pp. 599 – 608
01/21/25	T	12	2 nd and 3 rd Law of Thermodynamics, Work, Gibbs Free Energy, Rxn Direction	pp. 609 – 618
01/23/25	R	13	Chemical Equilibrium, Definitions, Law of Mass Action, Equilibrium Constant, Homogeneous/Heterogeneous Equil.	pp. 627 – 638
01/28/25	T	13	Le Châtelier's Principles, Effects of Concentration, Pressure, and Temperature Changes, Direction of Change	pp. 639 – 656
01/30/25	R	14	Acid/Base Definitions and Equilibria, pH, pOH	pp. 669 – 678
02/04/25	T	14	pK _a , pK _b , Relative Acid/Base Strengths, Quantitative Analysis Molecular Structure, Binary/Ternary Acids, Graphical Analysis	pp. 678 – 692
02/06/25	R	14	Hydrolysis of Salts, Polyprotic Acids, Buffers, Titrations, Indicators, Applications	pp. 692 – 713
02/11/25	T	15	Precipitation Equilibria	pp. 725 – 739
02/13/25	R	15	Lewis Acid/Base Chemistry, Coupled Equilibria Jeopardy I, exam review (during 3 rd period)	pp. 739 – 747
02/18/25	T	12–15	Exam #1	
02/20/25	R		Atmospheric Chemistry (AC), composition, upper atmosphere, ozone chemistry, CFCs and their implications	ARM ⁵
02/25/25	T		The greenhouse effect, CO ₂ and other greenhouse gases	ARM ⁵
02/27/25	R		Acid rain, NO _x and SO _x chemistry	ARM ⁵
03/04/25	T	16	Electrochemistry, redox rxns, electrochemical cells, half-rxns, electrical work, standard cell potential	pp. 759 – 772
03/06/25	R	16	Equilibrium, Free Energy, Nernst Equation, Batteries, Fuel Cells, Corrosion, Electrolysis	pp. 772 – 790
03/11/25	T	18	Metallurgy, Metalloids, Nonmetals, Jeopardy II, exam review	pp. 862 – 889
03/13/25	R	16, 18, AC	Exam #2	
03/25/25	T	19	Transition metals, Coordination Chemistry	pp. 939 – 966
03/27/25	R	19	Crystal Field Theory, Spectroscopy, Magnetism	pp. 966 – 974
04/01/25	T	20	Nuclear Chemistry, Nuclear Structure and Stability, Nuclear Reactions, Radioactive Decay, Radiometric Dating,	pp. 981 – 1001
04/03/25	R	20	Transmutation and Energy, Uses of Radioisotopes, Biological Effects	pp. 1002 – 1026
04/08/25	T	21	Organic Chemistry, Types of Organic Molecules, Nomenclature, Lewis Structures	pp. 1037 – 1073
04/10/25	R	21	Classes of Organic Rxns, Functional Groups, Properties, Reactivities, Curved Arrow Notation	ARM ⁵
04/15/25	T	21	Isomerism, Molecular Orbitals, Aromaticity.	ARM ⁵
04/17/25	R	19–21	Jeopardy III, exam review. 3 rd period guest lecture. Speaker tbd	
04/22/25	T	19–21	Exam #3	
05/02/25	F		Comprehensive Final Exam (Optional) 12:30pm – 2:30pm	in FLI 050

⁵ ARM = additional reading material supplied by the instructor.

Office Hour Schedule for CHM2051:

tbd

Further Important Information:

1. **Course Objectives and Student Learning Outcomes:** The second semester of the General Chemistry 1 and 2 sequence (CHM 2045/CHM 2045L and CHM 2046/CHM 2046L). CHM2051 is equivalent in content to CHM2046. As the honors version it treats some of the material more in depth. The course covers the principles of chemistry including thermodynamics, equilibrium phenomena such as acid/base and solubility equilibria, electrochemistry, nuclear chemistry, 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 (specifically Organic Chemistry I). A minimum grade of C is required to pass the course and to progress to Organic Chemistry I. This course is designed for students pursuing careers in the sciences or who need a more rigorous presentation of chemical concepts than is offered in an introductory course. Students will engage in problem solving and critical thinking while applying chemical concepts. Specifically, a student who successfully completes this course will be able to:

- (A) apply the three laws of thermodynamics to chemical problems;
- (B) implement rules of significant figures to all measurements;
- (C) explain the fundamental properties of matter including but not limited to atomic and electronic structure, states and phases of matter, and solubility;
- (D) predict physical and chemical changes of matter upon changes in temperature and pressure;
- (E) predict and explain the products of chemical reactions (*e.g.*, acid-base, oxidation-reduction, precipitation, dissociation, and combustion);
- (F) set-up and evaluate galvanic cells and predict the voltage produced by them;
- (G) predict the outcome of nuclear reactions and account for proton and neutron numbers in reactants and products;
- (H) recognize and describe basic classes of organic molecules and name them according to IUPAC rules;
- (I) analyze data presented in graphic format and produce graphs that illustrate chemical data;
- (J) recall major scientific developments that have led to the current state-of-the-art in chemistry;
- (K) apply the scientific method when discussing scientific facts as they relate to chemistry;
- (L) formulate empirically testable hypotheses derived from the study of physical and chemical processes;
- (M) apply techniques of discovery and critical thinking to predict and evaluate outcomes of experiments;
- (N) assess impacts chemistry has on society, science, and the environment.

2. **General Education Objectives and Learning Outcomes:** Primary General Education Designation: Physical Sciences (P) ([area objectives available at this link](#)). A minimum grade of C is required for general education credit. Courses intended to satisfy the general education requirement cannot be taken S/U.

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.

The course objectives (1. A – N) align with the UF General Education student learning outcomes and physical science area learning outcomes, and are assessed as described in the table below.

General Education SLO	Physical Science SLO	Assessment
Content <i>Students demonstrate competence in the terminology, concepts, theories and methodologies used within the discipline.</i>	Identify, describe, and explain the basic concepts, theories and terminology of natural science and the scientific method; the major scientific discoveries and the impacts on society and the environment; and the relevant processes that govern biological and physical systems.	Content knowledge is assessed through assigned homework problems, exams, and pre-lecture LC assignments.
Critical Thinking <i>Students communicate knowledge, ideas, and reasoning clearly and effectively in written and oral forms appropriate to the discipline.</i>	Formulate empirically-testable hypotheses derived from the study of physical processes or living things; apply logical reasoning skills effectively through scientific criticism and argument; and apply techniques of discovery and critical thinking effectively to solve scientific problems and to evaluate	Critical thinking is assessed through assigned homework problems, exams, and pre-lecture LC assignments.

	outcomes.	
Communication <i>Students analyze information carefully and logically from multiple perspectives, using discipline-specific methods, and develop reasoned solutions to problems.</i>	Communicate scientific knowledge, thoughts, and reasoning clearly and effectively.	Communication is assessed through assigned homework problems and in-class LCs problems and discussions.

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 is essential for success in the course (see also #13 below). Lecture attendance requires active participation on the student's 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.
 - Small group discussions are held during most lecture periods in which students will discuss and apply the concepts learned in class under the guidance of the instructor. These activities focus on problem solving and further explore difficult concepts that need additional explanation beyond the lectures. Students are expected to participate actively. This will not only give students helpful feedback on their own work but also train their logical reasoning skills through scientific criticism and argument.
 - Weekly graded homework assignments involve 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 in their own words.
 - Three mid-term exams will be administered throughout the semester. Due to time constraints exam questions can not be as detailed and time-intensive as the homework problems. Emphasis is placed on testing the student's reasoning skills and their understanding of the material rather than rote memorization of facts. On their exams, students will receive all pertinent equations.
 - Office Hour attendance is strongly recommended. 39 (tbd) weekly office hours are offered by instructor 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.
3. **Class Meeting Times and Instructor:** The course is split into two sections (class numbers 18074 and 18075) which meet TR2–3 periods in FLI050. 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 at 8:35 am. 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.
 4. **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 2024 term. The course is organized around a smaller classroom environment more conducive to an interactive teaching style. While we will cover the same material 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 allocated to drills. Students are expected to spend significant amounts of time outside the classroom to work on their 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.
 5. **Course Fees:** There are no course fees for CHM2051.
 6. **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/>.
 7. **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 can be 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 on front and back 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 (does not apply here since we won't have evening exams), 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 must e-mail your instructor (through the course Canvas interface) the documentation at least *one week prior* to the scheduled exam date 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. You may also contact the Dean of Students Office who can provide instructor-notification based on the documentation you provide to them. Your instructor will follow UF academic regulations in evaluating the notification and/or documentation received. In the case of a valid 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.

Exam Grade Disputes: Any and all exam grade disputes must be brought to the instructor's attention within two weeks of students getting back their graded exams.

Average/Replace Policy: 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). The "average/replace" policy will help minimize the impact of a single poor performance.

Tip for Exam Preparation: While studying for your exams, prepare your note sheet with important information, equations, concepts, anything that you might need and don't want to memorize for your exams.

8. **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).
9. **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/>).
10. **Participation Grade: Learning Catalytics (LC) Grade:** In this course, we will use LC for your digital device to respond to questions pertaining to the study material. Up to 9% of your total grade can be earned through LC activities. 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. There will also be LC pre-lecture assignments due before class starts covering the reading assignments (see schedule on page 2) and will typically be available a full day before each lecture. Please note that LC questions will be assigned throughout the term based on class progress and their total number is not yet known at the beginning of the semester. To achieve 100% of the LC grade (90 points for 9% of your final grade), you need to answer 75% of all LC questions

correctly. If you earn less than 75% of the achievable LC points, your LC score will be prorated accordingly 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 LC points amount to $60(90/75) = 72$ which counts for 7.2% toward his final grade in the class. 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. 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 helpdesk 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 for this activity. If you don't have access to a digital device, please contact the instructor.

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 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 instructor's 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 instructor, the graduate TA, and 15 undergraduate TAs offer a total of 35 different office hours spread out 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 you are not limited to only the TA assigned to your team. Please note that all TA office hours and Dr. A's M-5 period OH are on zoom at the following link: <https://ufl.zoom.us/j/96320318806>.
17. **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 UF course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.
18. **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.
19. **Counseling Services:** The University of Florida provides counseling services for students, staff, and faculty. See <https://counseling.ufl.edu/>. If you or a friend are in distress, call 352-392-1575 (M – F, 8am – 5pm), email umatter@ufl.edu, or walk in for emergency consultation during service hours (9:00 am – 4:00 pm) at 401 Peabody 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.

20. **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/>,

Infirmery (Student Health Care Center): 352-392-1161, <http://shcc.ufl.edu/>.

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

21. **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 for well qualified students to work as tutors.

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/>

22. **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!

23. **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.

24. **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/>.

25. **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.

I am looking forward to spend the semester with you and introduce you to some of the fundamentals of modern chemistry. If you have further questions, please contact me. Have a great semester!

Sincerely Yours,

Dr. Alexander Angerhofer (Dr. A)