## CHM2051 — Honors General Chemistry II — Spring 2020

Credits: 3; Prereq: MAC 1147 or the equivalent, and a minimum score of 'B+' for CHM2045; Coreq: CHM 2046L.

The second semester of the CHM2045/2045L and CHM2051/2046L sequence. This course is open to students with superior performance in CHM2045 or its equivalent. Acids and bases, additional aspects of chemical equilibria, thermodynamics, electrochemistry, complex ions, descriptive chemistry and instructor-chosen topics. (P)

Instructor	Dr. Alexander Angerhofer (Dr. A)
Phone	392 0541 (office, LEI214A), 392 9489 (office, CLB318A), or 392 2123 (lab, CLB303)
E-mail	alex@chem.ufl.edu
O.H.	T-10, W-11 in JHH202 and F-8 in LEI 214A, and by appointment.

TAs	Thai Son Cao, (thaison@chem.ufl.edu), OH: M-8, W-7,9 in the CLC* and by appt
	Emily DeGrange (e.degrange@ufl.edu), OH: T-6, W-8 in the CLC*.
	Allison Epstein (allisonepstein@ufl.edu), OH: W-10, R-5 in the CLC*.
	Catherine Fabiano (cfabiano@ufl.edu), OH: T-9, R-10 in the CLC*.
	Kara Gentry (kgentry@ufl.edu), OH: T-4, R-7 in the CLC*.
	Jason Gill (jason.gill@ufl.edu), OH: W-3, R-8 in the CLC*.
	Ivelina Kioutchoukova (ikioutchoukova@ufl.edu), OH: W-6, R-9 in the CLC*.
	Brian Nguyen (brian.nguyen1@ufl.edu), OH: M-7, R-4 in the CLC*.
	Sergio Prieto (prieto.sergio@ufl.edu), OH: M-4, F-4 in the CLC*
	Jackson Pugmire (j.pugmire@ufl.edu), OH: M-5, W-5 in the CLC*.
	Skye Speakman ( <u>skyespeakman@ufl.edu</u> ), OH: T-7, F-7 in the CLC*.
	Yinlu Zhu ( <u>yinlu.zhu@ufl.edu</u> ), OH: M–6, R–6 in the CLC <sup>*</sup> .

\*Chemistry Learning Center, 1<sup>st</sup> floor of JHH, room #105.

Class Meeting Times <sup>1</sup>	TR2-3 periods, 8:30am-10:25a	m in Leigh Hall 207
Holidays	01/20 (MLK Day), 03/02–06 (Sp classes).	pring Break), 04/23–24 (Reading Days, no
Class Text	First 2e by OpenStax. ISBN: 978 M. Silberberg, "Chemistry: The Advanced Topics," 8th Edition,	<u>ts/chemistry-atoms-first-2e</u> . Chemistry: Atoms 8-1-947172-63-0. This text is recommended. Molecular Nature of Matter and Change With McGraw-Hill, New York 2018, ISBN: 978- red. Any reasonably recent General Chemistry to review and look up material.
Homework	Homework will be assigned wee Homework will be graded.	kly except during weeks of during-term exams.
% Earnable	10 homeworks @ 1% each, for 1	ng catalytics) @ 9% of final grade. $de.$
Grading Scheme <sup>3</sup>	$\begin{array}{l} \mathrm{A:} \geq 85\%, \\ 82.4\% > \mathrm{B+} \geq 80.0\%, \\ 74.9\% > \mathrm{B-} \geq 72.5\%, \\ 69.9\% > \mathrm{C} \geq 65.0\%, \\ 62.4\% > \mathrm{D+} \geq 60.0\%, \\ 54.9\% > \mathrm{E}. \end{array}$	$\begin{array}{l} 84.9\% > A- \geq 82,5\%, \\ 79.9\% > B \ \geq 75.0\%, \\ 72.4\% > C+ \ \geq 70.0\%, \\ 64.9\% > C- \ \geq 62.5\%, \\ 59.9\% > D- \ \geq 55.0\%, \end{array}$

<sup>1</sup> See additional information on #2 on page 4 of this syllabus.

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

<sup>2</sup> 3 see https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx for more info on UF grade policies.

## Course Schedule (tentative):

Date	Day	Chap.	Торіс	Reading	
01/07/20	Т	17	Disc. of Syllabus and review of chapter 17, Chemical Kinetics	pp. 871 –	897
01/09/20	R	12	Thermodynamics, Spontaneity, Entropy, and Microstates.	рр. 657 –	667
01/14/20	Т	12	2 <sup>nd</sup> and 3 <sup>rd</sup> Law of Thermodynamics, Work, Gibbs Free Energy, Rxn Direction.	рр. 667 –	676
01/16/20	R	13	Chemical Equilibria, Definitions, Law of Mass Action, Equilibrium Constant, Homogeneous/Heterogeneous Equil.	рр. 685 –	697
01/21/20	Т	13	Le Châtelier's Principles, Effects of Concentration, Pressure, and Temperature Changes, Direction of Change.	рр. 698 –	715
01/23/20	R	14	Acid/Base Definitions and Equilibria, pH, pOH, pKa, pKb, Relative Acid/Base Strengths, Quantitative Analysis.	рр. 729 –	752
01/28/20	Т	14	Molecular Structure, Binary/Ternary Acids, Hydrolysis of Salts, Polyprotic Acids, Guest Lecture (Prof. Daniel Savin, UF Dept. of Chemistry).	рр. 752 –	762
01/30/20	R	14	Buffers, Titrations, Indicators, Graphical Analysis.	рр. 762 –	775
02/04/20	Т	12–14	Jeopardy I, exam review.		
02/06/20	R	12–14	Exam #1.		
02/11/20	Т	15	Precipitation Equilibria, Lewis Acid/Base Chemistry.	рр. 789 –	813
02/13/20	R		Atmospheric Chemistry (AC), composition, upper atmosphere, ozone chemistry, CFCs and their implications.	ARM <sup>4</sup>	
02/18/20	Т		The greenhouse effect, $CO_2$ and other greenhouse gases.	ARM	
02/20/20	R		Acid rain, NOx and SOx chemistry.	ARM	
02/25/20	Т	16	Electrochemistry, redox rxns, electrochemical cells, half-rxns, electrical work, standard cell potential.	рр. 827 –	841
02/27/20	R	16	Equilibrium, Free Energy, Nernst Equation, Batteries, Fuel Cells.	рр. 841 –	852
03/10/20	Т	16	Corrosion, Electrolysis, Period 3: Guest Lecture (Prof. Mark Orazem, Dept. of Chem. Engn.)	рр. 852 –	861
03/12/20	R	15, 16, AC	Jeopardy II, exam review		
03/17/20	Т	15, 16, AC	Exam #2		
03/19/20	R	19	Transition metals, Coordination Chemistry.	pp. 1027	- 1057
03/24/20	Т	19	Crystal Field Theory, Spectroscopy, Magnetism,.	pp. 1057	- 1066
03/26/20	R	20	Nuclear Chemistry, Nuclear Structure and Stability, Nuclear Reactions	pp. 1075	- 1085
03/31/20	Т	20	Radioactive Decay, Radiometric Dating, Transmutation and Energy.	pp. 1086	- 1111
04/02/20	R	20	Uses of Radioisotopes, Biological Effects, Periood 2: Guest lecture (Prof. Assel Aitkalyeva, Dept. of Mat. Sci. & Engn.)	pp. 1112	- 1125
04/07/20	Т	21	Organic Chemistry, Types of Organic Molecules, Nomenclature, Lewis Structures.	pp. 1137	- 1175
04/09/20	R	21	Classes of Organic Rxns, Functional Groups, Properties, Reactivities, Curved Arrow Notation.	pp. 1137	- 1175
04/14/20	Т	21	Isomerism, Molecular Orbitals, Aromaticity.	ARM	
04/16/20	R	19–21	Jeopardy III, exam review.		
04/21/20	Т	19–21	Exam #3		
04/29/20	W		Comprehensive Final Exam (Optional) 10:00am – 12:00pm.		

 $<sup>\</sup>overline{4 \quad ARM = additional reading material supplied by the instructor.}$ 

## Office Hour and Class Schedule for CHM2051:

	SPRING 2020 UNIVERSITY OF F	SPRING 2020 UNIVERSITY OF FLORIDA	IDA							SC	SCHEDULE CARD
				NAME:	CHM2051 (s	CHM2051 (sections G511 and G512)	and G512)				
					meeting time	meeting times and office hours	ours				
			Un	Univ. Address:					Univ. Phone:		
Per.	Hour	Monday	Bldg/Rm #	Tuesday	Bldg/Rm #	Wednesday	Bldg/Rm #	Thursday	Bldg/Rm #	Friday	Bldg/Rm #
<b>_</b>	7:25-8:15										
2	8:30-9:20			CHM2051	LEI 207			CHM2051	LEI 207		
ယ	9:35-10:25			CHM2051	LEI 207	OH (Jason)	CLC	CHM2051	LEI 207		
4	10:40-11:30	OH (Sergio)	CLC	OH (Kara)	CLC			OH (Brian)	CLC	OH (Sergio)	CLC
5	11:45-12:35 p	OH (Jackson)	CLC			OH (Jackson)	CLC	OH (Allison)	CLC		
6	12:50-1:40	OH (Yinlu)	CLC	OH (Emily)	CLC	OH (Ivelina)	CLC	OH (Yinlu)	CLC		
7	1:55-2:45	OH (Brian)	CLC	OH (Skye)	CLC	OH (Thai)	CLC	OH (Kara)	CLC	OH (Skye)	CLC
8	3:00-3:50	OH (Thai)	CLC			OH (Emily)	CLC	OH (Jason)	CLC	OH (Dr. A)	LEI 214A
9	4:05-4:55			OH (Catherine	CLC	OH (Thai)	CLC	OH (Ivelina)	CLC		
10	5:10-6:00	staff meeting	JHH202	OH (Dr. A)	JHH202	OH (Allison)	CLC	DH (Catherine	CLC		
11	6:15-7:05					OH (Dr. A)	JHH202				
н -1	7:20-8:10										
E-2	8:20-9:10										
E-3	9:20-10:10										
	Comments:	*CLC: The C	Comments: *CLC: The Chemistry Learning Center in JHH105	mina Center i	in JHH105						

## 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: The class meets in LEI207, TR2-3 periods (8:30 am 10:25 am). Since we have double–block periods the meeting times will be organized as follows: We will start 5 minutes late, 8:35 am, and we will end class 5 minutes early, 10:20 am. The ten minutes lost will be recovered by reducing the break time between the 2<sup>nd</sup> and 3<sup>rd</sup> periods from 15 to 5 minutes. The 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.
- 3. **Honors:** The two sections, G511 and G512, of this course are for students who performed at a high level in CHM2045, demonstrated by a minimum of a 'B+' grade by the end of the fall 2019 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. Please do not purchase the tophat app unless you need it for some other course.
- 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 nine 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

#9). 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.

- Approximately 30 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.
- 5. **Math Requirements:** Students are expected to have a solid grasp of pre-calculus algebra and trigonometry and need to show credit for MAC1147 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: <a href="http://www.wolframalpha.com/">http://www.wolframalpha.com/</a>.
- 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 approximately 115 minutes. 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: <u>https://catalog.ufl.edu/UGRD/academic-regulations/examination-policies-reading-days/. Exam Absences:</u> will be handled in accordance with official UF 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 <u>https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/#absencestext</u>. If you must be absent for an exam due to a documented and approved conflict known in advance, you must e-mail your instructor (alex@chem.ufl.edu) 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. Exam Grade Disputes: Any and all exam grade disputes must be dealt with within two weeks of the

- scheduled exam date.
  7. Canvas: Access your Canvas e-learning account by clicking on the 'Log-In to E-Learning' link on the web site, <u>http://lss.at.ufl.edu/</u> 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
- 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 (<u>http://helpdesk.ufl.edu/</u>, 352-392-4357 M-F from 8:00 am till 5:00 pm, email <u>helpdesk@ufl.edu</u>, or go to: <u>http://helpdesk.ufl.edu/e-learning-support/</u>).
- 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 on the following Thursday at the beginning of class. Late HW policy: HW is late if it is not delivered at the beginning of the class period. 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. HW problems come from many different sources, including the instructor's own personal list 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!
- 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 short learning catalytics pre-lecture assignments due before class. They pertain to the reading assignments (see schedule on page 2) and will typically be available by noon the day before a lecture.

- 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 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 <a href="https://support.pearson.com/getsupport/s/contactsupport">https://support.pearson.com/getsupport/s/contactsupport</a>. 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.
- 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: <a href="https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx">https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx</a> .
- 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 instructor's and/or TAs' office hours, talk to other students in your class, compare notes, form a study group, consult other text books, go to the CLC (Chemistry Learning Center) in Joseph Hernandez Hall 105, *etc*.
- 15. **Study Groups:** It is highly encouraged to form study groups (within or beyond the 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, twelve undergraduate TAs, and one graduate student TA offer a total of 30 office hours spread over the whole week. The detailed times and locations are listed on the first page of this syllabus and the table on the third page. This is time we set aside for you. Take advantage of it! Please note that the instructor and all TAs are available to help students in any of the two sections or six teams. You are not limited to only the TAs assigned to your team. Moreover, the CLC (Chemistry Learning Center in JHH105) is staffed with General Chemistry TAs (from the CHM2046/L courses) throughout the week between periods 2 and 10 and you will be able to get help with your General Chemistry questions from any of them.
- 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 <a href="https://gatorevals.aa.ufl.edu/students/">https://gatorevals.aa.ufl.edu/students/</a>. 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 <a href="https://ufl.bluera.com/ufl/">https://ufl.bluera.com/ufl/</a>. Summaries of course evaluation results are available to students at <a href="https://gatorevals.aa.ufl.edu/public-results/">https://gatorevals.aa.ufl.edu/students/</a>.
- 18. **Students with Disabilities:** Students with disabilities requesting accommodation should first register with the Disability Resource Center (352-392-8565, <u>http://www.dso.ufl.edu/drc/</u>) 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 <u>http://www.counseling.ufl.edu/cwc/</u>. If you or a friend are in distress, call 352-392-1575 (available 24/7), email <u>umatter@ufl.edu</u>, 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. 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: <u>http://www.police.ufl.edu/</u>,
UF Emergency management: 352-273-2100. <u>https://emergency.ufl.edu/</u>,
Infirmary (student health center): 352=392-1161, <u>http://shcc.ufl.edu/</u>.
EH&S (Environmental Health & Safety): 352-392-1591, <u>http://www.ehs.ufl.edu/</u>.

21. Other Academic Resources: UF provides several other resources for students, such as Library Support here: <u>http://cms.uflib.ufl.edu/ask</u>, 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 <u>https://career.ufl.edu/</u> 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 <u>http://teachingcenter.ufl.edu/</u> 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: <u>https://writing.ufl.edu/writing-studio/</u>. 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 <u>https://ombuds.ufl.edu/</u>

- 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 in each team will set up 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 which can be found at: https://www.dso.ufl.edu/sccr/process/student-conduct-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. 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/.
- 25. **Disclaimer:** This syllabus represents my current plans and objectives. If those need to change as the semester progresses, then the changes will be communicated to the class clearly and the syllabus will be updated.

I am 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 me. Have a great semester!

Sincerely Yours,

Alexander Angerhofer (Dr. A)