

CHM 2046 – GENERAL CHEMISTRY II – SPRING 2023

INSTRUCTOR INFORMATION

Instructor: Dr. Anna Brajter-Toth

Email: in Canvas preferred

Office Hours: in person **M 4th W 8th period in office, Sisler 228A**

M, W, F periods 3rd and 7th (9:35 -10:25 am (3rd); 1:55 – 2:45 pm (7th)).

Discussion Sections: For your registered section Discussion meeting time see <https://one.uf.edu/login/applicant> .

TEACHING ASSISTANTS

TA Information: Office Hours of the graduate teaching assistant (TA) instructors in this class, including your own teaching assistant, are posted on Canvas. You may see your own TA in this class during office hours, no appointment necessary, or visit the office hours of any other TA for the course.

Additionally, there is the Broward Teaching Center <https://academicresources.clas.ufl.edu/tutoring/> which offers resources for being successful in CHM2046.

Graduate TAs Discussion Instructors: Subhadeep Bera, Jhonti Chakraborty, Thomas Odey Magu, Bhumika Singh

Office hours: TBA on CANVAS

Undergraduate TAs: TBA

DISCUSSION SESSIONS

Discussion classes taught by graduate TA instructors meet per your scheduled day/time, and attendance is mandatory. Any grade discrepancy of grades assigned by your TA needs to be addressed to your graduate TA within a week of posting grades to Canvas.

COURSE FEES

Additional Course Fees: none

GENERAL EDUCATION OBJECTIVES AND LEARNING OUTCOMES

Refer to the class website on the CANVAS course shell. A complete list of student learning outcomes is posted in Canvas, organized by module/chapter.

FIRST DAYS

Log into Canvas and access the course. Read the Syllabus and note the important dates. You should check Canvas daily for new Announcements and/or emails containing important information.

REQUIRED AND RECOMMENDED COURSE MATERIALS

TEXTBOOK (ONLINE EBOOK WITH HW; REQUIRED IN FULL)

The text Chemistry: The Molecular Nature of Matter and Change, 9th ed., Silberberg & Amateis (McGraw Hill) is required. Access to the textbook is via the **ALEKS platform** accessed **through a link in your Canvas course**. Electronic (ALEKS) homework assigned in this course can be accessed via the same link. You must purchase ALEKS (for access to text and electronic homework) for the course.

There are two options for purchasing access to homework/ebook: **Option 1**: consent to have the purchase price charged to your student account following the directions posted on the course homepage in Canvas; this is a time-limited option after which only Option 2 is available. **Option 2**: purchase an access code for the materials at the UF Bookstore (at a slightly higher price).

To opt in, navigate to: <https://www.bsd.ufl.edu/allaccess> Click the "Opt In" tab or view the "View Eligible UF All Access Classes" button. You will be prompted to log in using Gatorlink credentials. Follow the prompt to authorize charges to your student account. The access code will then be provided. Copy the access code to your clipboard. In the Canvas course, click on the ALEKS module, and provide the access code when prompted to do so. If you have any questions about the authorization process or refunds, contact Included@bsd.ufl.edu.

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

All other assigned course material will be available through Canvas.

CALCULATOR (REQUIRED, MUST PURCHASE)

You will require a calculator capable of logarithmic functions. For exams, the calculator must be non-graphing and non-programmable and not a smart phone calculator.

GENERAL INFORMATION

Course Delivery Method: This course will be delivered in the classroom during the scheduled class meeting times listed above. For course content see the class website on the CANVAS course shell. Required Discussion Sections meetings will occur during scheduled discussion period. *Verify your registered section for Discussion meeting time at <https://one.uf.edu/login/applicant>.*

COURSE DESCRIPTION AND GOALS:

This course is the second semester of the CHM 2045/CHM 2045L, CHM 2046/CHM 2046L sequence. Students who completed CHM 2045 or equivalent at another institution should consult a chemistry advisor before registering for this course. The course will cover topics including: additional aspects of chemical equilibria, acids and bases, thermodynamics, electrochemistry, coordination compounds and descriptive chemistry.

As both a general education requirement and major's course, CHM 2046 serves to teach general chemistry knowledge, the scientific method, skills for problem solving, and a connection to the principles that govern the natural world.

PRIVATE OR GRADE RELATED QUESTIONS

Direct these to your course instructor (Dr. Toth) via the mail function in Canvas. For questions about grades assigned in discussion by your graduate TA instructors, contact your graduate TA via the mail function in Canvas. Do not email outside of Canvas to your instructor's or TAs external email address – we aren't permitted to discuss grade related questions outside of Canvas. You will be asked to resend the query through Canvas.

Instructors response time to email queries is <48 h during the workweek, or the first business day for emails received Friday or over the weekend.

COURSE POLICIES

ASSIGNMENT DUE DATES

All due dates for assignments in the course Assignments on Canvas and or ALEKS pages are clearly posted on Canvas and reflect the most up-to-date information. For HW and Q assignments due dates due in Discussion, refer to the Discussion section of the Syllabus below. All assignments must be completed by the stated due date and time for credit. A Dean of Students note <https://dso.ufl.edu/>. verifying documentation of illness or personal matter must be provided for at least five of the seven days of the week of the assignments' deadline for accommodations to be considered.

ALEKS HOMEWORK

Your instructor may assign non-adaptive ALEKS homework.

EXAMS

Exams occur in the evenings, periods E2-E3, in exam rooms TBA. Exam Dates are provided in the Syllabus schedule at the end of this document. You are permitted use of a non-graphing non-programmable scientific calculator. Notes, cell phones or other electronic devices are not permitted. Scantrons and blank scratch paper are provided. A significant penalty is assessed for student failure to bubble in the correct form code on the scantron.

Students are expected to plan their work and other activities to be available at these times. Exam questions will be multiple choice and will consist of questions similar to the CWs, HWs, Qs, on-line practice quizzes and end-of- chapter problems which are recommended as the primary study tools. You will need a non-graphing non-programmable scientific calculator on exams, which is not a smart phone, as well as pencils and your UFID card.

Grades will be posted on CANVAS as soon as available. Contact Dr. Toth by e-mail on CANVAS about any errors you feel may have been made within ONE WEEK after the grades are posted on CANVAS.

PROGRESS EXAM "AVERAGE/REPLACE" POLICY

This applies to all students. No progress exam score will be dropped for any reason. 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 policy helps to minimize the impact of a single poor performance (it will not disappear but will be minimized). For example, if a student scores the following on their three progress exams: 0%, 65%, 80%, the 0% would be replaced with the average of 0, 65 and 80, which is 48%. That is a much better score than a 0.

EXAM ABSENCES

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 may include 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 (within Canvas) 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) <https://dso.ufl.edu/>. Your instructor will follow UF academic regulations in evaluating the notification and/or documentation received from you or from 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.

DISCUSSIONS

Discussions are held in person on Thursdays for all sections and start the **1st week of class**. Attendance is required. Attendance records will be maintained in discussion. The discussion classes will include solving problems from homework (HW) and quizzes (Qs) and some new material. Homework (HW) problem set and Q set will be available on CANVAS. HW and Q will need to be printed and submitted to your TA before the Thursday discussion. For HW schedule refer to the weekly Schedule at the end of the Syllabus.

Some weeks you will need to turn in the quiz and the homework (see the weekly Schedule below). The weekly schedule shows the week when the HW and Quiz will be due. The completed HW and quizzes are your study tools. For additional information see the CANVAS class shell.

Those who complete and turn in on time all Qs and all HWs, and have a perfect attendance record in discussion, will get the maximum possible score for the HWs/Qs. Grade distributions are shown below. Late adjustments will not be made.

DISCUSSION HOMEWORK

The first of 10 graded HW sets will be available on CANVAS and will be due the first week of class. You will need to print the HW and complete it by hand. **Completed** HW is to be turned in by Wednesday before Thursday discussion to your TA. Late HW is not accepted. Instructions for submitting the HW are available on CANVAS. HW problems will be discussed in Thursday discussions. You will be able to correct and/or verify your answers. The completed corrected HW will serve as your HW key. You will get a grade for the returned and completed HW. The grades for 10 HWs will count in your grade. Grades for the HW will be posted each week. Your TA has to be alerted about HW grade adjustments within **ONE week** after the grades are posted on CANVAS. Late adjustments will not be made.

There will be no HW due the week of the exam. The week of the exam new material will be discussed in Discussions. For schedule refer to the weekly Schedule at the end of the Syllabus.

In addition, a number of recommended practice HW problems are posted on-line on CANVAS in each Module as study tools and in ALEKS assignments section. **Additional practice end-of-chapter problems (EOC) are recommended in the posted HW.** [Working class worksheet problems, on-line problems and end-of-chapter problems \(EOC\) is recommended as the primary study activity.](#) ALEKS provides solutions to the recommended end-of-chapter problems.

DISCUSSION QUIZZES

Quizzes (Q) (four quizzes) will also be available on CANVAS. For Q schedule refer to the Schedule at the end of the Syllabus. You will need to print the quiz and complete it by hand. The completed quiz is to be turned to your TA by Wednesday before the following discussion on Thursday. Late Q is not accepted. You will be able to correct and/or verify your answers in discussions. The completed corrected Q will serve as your Q key.

You will get a grade for all returned completed Q. Grades for the Qs will be posted within a week. Your TA has to be alerted about Q grade adjustments [within ONE week](#) after the grades are posted on e-learning.

POSTED GRADE DISPUTES

Should a student wish to dispute any grade received in this class, the dispute must be in writing (via Canvas e-mail to *your* instructor and submitted within one week of the grade being posted to Canvas. For grades assigned in discussion contact *your* graduate TA. After one week has passed from when the grade was posted and the student made aware of the posting of the grade(s) to Canvas, the instructor considers those grades final.

ATTENDANCE, EXTENSION REQUESTS

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:
<https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/#absencestext>

WORKLOAD

As a Carnegie I, research-intensive university, UF is required by federal law to assign at least 2 hours of work per week outside of class for every contact hour. Work done in these hours may include reading/viewing assigned material and doing explicitly assigned individual or group work, as well as reviewing notes from class, synthesizing information in advance of exams or papers, and other self-determined study tasks.

GRADING

GRADES POLICY

There is no extra credit available for this course. Grades are not rounded at the end of term. Exam grades or course grades are not curved. Current UF grading policies for assigning grade points can be found in <https://catalog.ufl.edu/>

GRADES:

Grades for the term will be determined as follows:

3 Progress Exams (3 @ 200 pts each = 21.25% each)	63.75%
Final Cumulative Exam (200 pts)	21.25%
Homework - Discussion (10 @ 5 pts each = 0.7% each)	7%
Graded Quizzes- Discussion (4 @ 5 pts each = 2%)	8%
TOTAL (870 points)	100%

Grade scale (note: there is no rounding to your score in Canvas):

Letter	A	A-	B+	B	B-	C+	C	D+	D	D-	E
Cutoff	90.0	86.0	83.0	80.0	76.0	72.0	68.0	64.0	60.0	56.0	< 56.0

The following **grade cutoffs** will be used (these are non-negotiable):

90 -100% = A	86-89.9% = A-	83-85.9% = B+	80-82.9% = B	76-79.9% = B-
72-75.9% = C+	68-71.9% = C	64-67.9% = D+	60-63.9% = D	56-59.9% = D-
< 56.0% = E				

Posted grades: Should a student wish to dispute any grade received in this class, the dispute must be in writing (via Canvas e-mail to *your* instructor) within one week of the grade being posted to Canvas. For grades assigned in discussion contact *your* graduate TA) via Canvas e-mail and submitted. After one week has passed from when the grade was posted and the student made aware of the posting of the grade(s) to Canvas, the instructors consider those grades final.

TENTATIVE SCHEDULE:

The following is a tentative schedule, subject to change as needed:

Module	Dates (M W F)	Topic	Reading	HW & Q
1	Jan. 9,11,13	Chemical Equilibrium	Chapter 17	1
	Jan 16 (M)	MLK HOLIDAY		
1 <i>contd</i> , 2	Jan.18, 20	Chemical Equilibrium Problem Types	Chapter 17	2 Q1
2	Jan 23, 25, 27	Acids & Bases, pH & K_w	Chapter 18	3
3, 4	Jan 30; Feb 1, 3	Acids & Bases Calculations	Chapter 18	4 Q2
4 <i>contd</i>	Feb 6 (M)	Acids & Bases, Buffers	Chapter 18, 19	
Exam 1 Feb 8 Wednesday Room TBA 8:20 pm to 10:00 pm			Chapters 17,18, 19	
4 <i>contd</i>	Feb. 10 (F)	Titrations	Chapters 19	CW 13
4 <i>contd</i> , 5	Feb 13, 15, 17	Titrations, Lewis A & B, Solubility	Chapters 18, 19	5

5 contd, 6	Feb 20, 22, 24	Solubility, Thermodynamics	Chapters 19, 20	Q3
6 contd, 7	Feb 27, Mar 1, 3	Redox Reactions, Structure & Bonding	Chapters 21, 18.6	6
7 contd	Mar 7 (M)	Electrochemistry	Chapter 21	
Exam 2 Mar 8 Wednesday Room TBA 8:20pm to 10:00 pm			Chapters 19, 20, 21	
7	Mar 10 (F)	Electrochemistry	Chapter 21	
	Mar 13-17	SPRING BREAK		
7 contd, 8	Mar 20, 22, 24	Electrochemistry	Chapter 21	7
7, 8 contd	Mar 27, 29, 31	Electrochemistry, Consumer Chemistry, Coordination Compounds	Chapter 21, 22, 23	8
8, 9	Apr 3, 5, 7	Transition Elements	Chapter 23	9 Q4
9	Apr 10, 12	Coordination Compounds	Chapter 23	
Exam 3 Apr 13 Thursday Room TBA 8:20pm to 10:00 pm			Chapters 21, 23	
9,10	Apr 14 (F)	Coordination Compounds	Chapter 23	
10 contd	Apr 17,19, 21	Nonmetals	Chapter 14, 15	10
11	Apr 24, 26	Finish Up & Review		
May 1 Monday Final Exam 7:30 am to 9:30 am			Cumulative	

Note: In class we will work using Class Worksheets (CWs). The CWs are your best study tools. The CWs are available on CANVAS. It is recommended that you print the worksheets and use them to take your own lecture notes. The topics that will be covered from each chapter will be selective and announced in class.

UNIVERSITY POLICIES

STUDENTS REQUIRING ACCOMMODATIONS

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center by visiting <https://disability.ufl.edu/>. It is important for students to share their accommodation information with their instructor (Dr. Toth) as early as possible in the semester.

Accommodations are not retroactive; therefore, students should contact the Disability Resource Center as soon as possible in the term for which they are seeking accommodations.

The DRC has 4 business day policy to submit Accommodated Testing Requests (ATRs).

UNIVERSITY POLICY ON ACCDEMIC MISCONDUCT

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

IN-CLASS RECORDING

All recordings of this class are available on-line. Specifically, students may not publish recorded lectures without the written consent of the instructor. A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session. Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third-party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

CAMPUS RESOURCES

U Matter, We Care: If you or someone you know is in distress, please contact https://cm.maxient.com/reportingform.php?UnivofFlorida&layout_id=10 352-392-1575, or visit [U Matter, We Care website https://umatter.ufl.edu/](https://umatter.ufl.edu/) to refer or report a concern and a team member will reach out to the student in distress.

Counseling and Wellness Center: Visit the [Counseling and Wellness Center website https://counseling.ufl.edu/](https://counseling.ufl.edu/) or call 352-392-1575 for information on crisis services as well as non-crisis services.

Student Health Care Center: Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the [Student Health Care Center website. https://shcc.ufl.edu/](https://shcc.ufl.edu/)

University Police Department: Visit UF Police Department website <https://police.ufl.edu/> call 352-392-1111 (or 9-1-1 for emergencies).

UF Health Shands Emergency Room / Trauma Center: For immediate medical care call 352-733-0111 or go to the emergency room at 7405 SW Archer Road, Gainesville, FL 32608; Visit the UF Health Emergency Room and Trauma Center website. <https://ufhealth.org/uf-health-shands-emergency-room-trauma-center>

GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the GatorWell website <https://counseling.ufl.edu/> or call 352-273-4450.

ACADEMIC RESOURCES

E-learning technical support: Contact the UF Computing Help Desk <https://helpdesk.ufl.edu/> 352-392-4357 or via e-mail at helpdesk@ufl.edu. Career Connections Center: Reitz Union Suite 1300, 352-392-1601 <https://career.ufl.edu/> . Career assistance and counseling services. Library Support: <https://uflib.ufl.edu/find/ask/> Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: <https://umatter.ufl.edu/office/teaching-center/> Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring. Writing Studio: <https://writing.ufl.edu/writing-studio/> 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers.

Student Complaints On-Campus: Visit the Student Honor Code and Student Conduct Code webpage <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/> for more information. On-Line Students Complaints: View the Distance Learning Student Complaint Process <https://distance.ufl.edu/>

FEEDBACK

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. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>

GETTING HELP

For issues with or technical difficulties with Canvas, contact the UF Help Desk: <https://helpdesk.ufl.edu/>; (352)-392-HELP.

CHEMISTRY LEARNING CENTER (CLC): There is free help available from graduate student teaching assistants. Your discussion TA will have office hours in CCB 105 (the CLC). Additionally, there is the teaching center <http://www.teachingcenter.ufl.edu> which offers some resources for being successful in your chm2046 class.

DISCLAIMER

This Syllabus represents current plans and objectives. If those need to change as the semester progresses, then the changes will be communicated to the class clearly.