

CHM1020 CHEMISTRY FOR THE LIBERAL ARTS

SPRING 2023

INSTRUCTOR INFORMATION

Instructor	Email/Office/Phone	Preferred Contact
Melanie Veige melveige@ufl.edu	Email in Canvas only 352-392-0518 SFH 103	Email through Canvas messaging Zoom office hours (TBA)

TEACHING ASSISTANT

Grad TA: TBA

Email: through Canvas email; Office hours (via Zoom): see Canvas for schedule

[Broward Teaching Center](#) offers free virtual tutoring assistance. See their website for details.

COURSE DELIVERY/MEETING TIMES

The course is 100% online/asynchronous. Students read through the text material and watch recorded lecture videos such that they keep up with the posted course schedule. Office hours are scheduled regularly during which time students may attend to ask course related questions. Outside of office hour times, students can post questions to the course Discussion Boards or use Canvas email.

COURSE FEES

Additional Course Fees: \$27.99

AUDIO/VIDEO PRESENCE POLICY

As in all courses, unauthorized recording and unauthorized sharing of recorded materials are prohibited.

GENERAL INFORMATION

PREREQUISITES

High school algebra.

COURSE DESCRIPTION AND GOALS

CHM 1020 is a terminal chemistry course for non-science students that presents the basic concepts of chemistry and examines the role of chemistry in both consumer products and the environment. (P)

By the end of this course, students should be able to analyze media as it pertains to topics related to chemistry, including the ability to interpret tables of data and graphs of various forms. Students will be competent in using mathematics to solve problems in chemistry. Students will be able to understand basic concepts related to atomic and molecular structure, and relationships between heat and energy. Students will be able to apply these concepts to explain the molecular and physical basis for climate change, solution chemistry, and atmospheric chemistry.

FIRST DAYS

Log into Canvas and access the course. You should check daily for new Announcements and/or emails containing important information and reminders. Click on the *Syllabus* tab to view all due dates for the entire semester. This will not change over the course of the semester. Click on *Modules* and read all of the information under the *Settling In* section.

GENERAL EDUCATION OBJECTIVES AND LEARNING OUTCOMES

Primary General Education Designation: Physical Sciences (P) ([area objectives available here](#))

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.

In Chemistry for the Liberal Arts, these objectives will be met in a variety of ways detailed below.

At the end of this course, students will be expected to have achieved the following learning outcomes in content, communication, and critical thinking:

Content: *Students demonstrate competence in the terminology, concepts, theories and methodologies used within the discipline.* Students will acquire a basic knowledge of a variety of chemistry concepts in the context of everyday life, including fuels, climate change, genetic engineering and nutrition. Achievement of this learning outcome will be assessed largely through assignments, discussions and quizzes.

Communication: *Students communicate knowledge, ideas, and reasoning clearly and effectively in written and oral forms appropriate to the discipline.* Students participate in class discussions throughout the semester to reflect on pertinent topics, some of which involve participation in online simulations. Students analyze news articles and summarize and indicate relevance of each to the course. Students complete assignments and interact with simulations which require written responses.

Critical Thinking: *Students analyze information carefully and logically from multiple perspectives, using discipline-specific methods, and develop reasoned solutions to problems.* Students prepare presentations throughout the course that requires research and analysis of work done by multiple authors. Students also curate and analyze news articles, and reflect critically on movies, literature, and interactive simulations.

COURSE LEARNING OUTCOMES

A complete list of student learning outcomes is posted in Canvas, organized by module/chapter.

REQUIRED & RECOMMENDED COURSE MATERIALS

There is no formal textbook adoption for this course.

CALCULATOR

You will require a calculator capable of logarithmic functions.

COURSE COMMUNICATIONS

GENERAL QUESTIONS

General course questions should be posted to the Discussion: Course Q&A in Canvas. The instructor/TA response time is <48 h (typically <24 h) during the work week.

I encourage you to post questions related to homework or end of chapter questions you're working on to the Discussion board. The homework isn't meant to be a test, it's a learning tool. For the best response, take a screenshot of your question and/or the solution you propose. The more information you provide, the easier it is for your instructor/TA/another student to help.

PRIVATE OR GRADE-RELATED QUESTIONS

Direct these to your instructor via the mail function in Canvas. Do not email outside of Canvas to your instructor's 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.

COURSE POLICIES

SYLLABUS QUIZZES/SURVEYS

You can submit these assignments late, with a 10% penalty per day submitted late. Make sure to open and submit the quizzes for all attempts prior to the due date to avoid the late penalty. Note that even 1 s past the due date counts as a whole day late.

QUIZZES/DISCUSSIONS/ASSIGNMENTS

Sectional quizzes are delivered through Canvas. These quizzes are not proctored, but may be timed, and are subject to the Honor Code. Various modules involve discussions and assignments, and 'New Quizzes'. Grade details are prominently posted in Canvas for each.

PLAYPOSIT

Participation points are available by watching lecture videos and supplemental videos for the course.

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/>

GRADING

GRADE 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. Lowest grades are dropped for all students as follows: Playposit Videos (lowest 5), Assignments (-2), Discussions (-2), Quizzes (-2).

Assignments weights are as follows:

Assignment Group	Weight %
Assignments and New Quizzes	40%
Classic Quizzes	40%
Discussions	15%
Videos (Playposit)	5%

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

Letter	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E
Cutoff	90.0	87.0	84.0	81.0	78.0	75.0	72.0	69.0	66.0	63.0	60.0	< 60.0

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 disability.ufl.edu/students/get-started. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

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

UNIVERSITY POLICY ON ACADEMIC 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, papers, 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: <http://www.dso.ufl.edu/SCCR/honorcodes/honorcode.php>.”

CAMPUS RESOURCES

U Matter, We Care: If you or someone you know is in distress, please contact umatter@ufl.edu, 352-392-1575, or visit [U Matter, We Care website](#) 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](#) 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](#).

University Police Department: Visit [UF Police Department website](#) or 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 1515 SW Archer Road, Gainesville, FL 32608; Visit the [UF Health Emergency Room and Trauma Center website](#).

GatorWell Health Promotion Services: For prevention services focused on optimal wellbeing, including Wellness Coaching for Academic Success, visit the [GatorWell website](#) or call 352-273-4450.

ACADEMIC RESOURCES

E-learning technical support: Contact the [UF Computing Help Desk](#) at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

[Career Connections Center](#): Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services.

[Library Support](#): Various ways to receive assistance with respect to using the libraries or finding resources.

[Teaching Center](#): Broward Hall, 352-392-2010 or to make an appointment 352- 392-6420. General study skills and tutoring.

[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](#) for more information.

On-Line Students Complaints: View the [Distance Learning Student Complaint Process](#).

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, 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/>.

NETIQUETTE

Please see the detailed Netiquette guide in the Settling In section of the Canvas course.

GETTING HELP

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

Other resources are available at <http://www.distance.ufl.edu/getting-help> for Counseling and Wellness resources, disability resources, resources for handling student concerns and complaints, and library desk support.

DISCLAIMER

This syllabus represents my current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.

TENTATIVE SCHEDULE OF TOPICS

*The most up to date complete schedule is posted in Canvas. This document may have been updated since posting– check Canvas for details.

Each module may involve readings, videos (Playposit), discussions, assignments, peer review, quizzes, new quizzes and/or interactive simulation components.

Course Orientation Jan 17

Module 1: Chemistry and the Scientific Method (Jan 26)

Lesson 1 Chemistry in Context 1/19

Lesson 2 Bad Science 1/23

Lesson 3 Scientific Method 1/25

Lesson 4 Scientific Method in our Everyday Lives 1/28

Module 2: Numbers Feb. 1

Lesson 1 Measurements 1/30

Lesson 2 Numbers 2/1

Module 3: The Periodic Table Feb. 10

Lesson 1 The Periodic Table 2/7

Lesson 2 Biography of a Chemist 2/10

Module 4: Compounds Feb. 21

Lesson 1 Ionic Compounds 2/16

Lesson 2 Molecular Compounds 2/21

Module 5: Earth March 7

Lesson 1 Chemical Safety 2/23

Lesson 2 Chemical & Physical Properties 2/27

Lesson 3 Chemical Reactions 3/2

Lesson 4 Fuel and Combustion 3/7

Module 6: Air March 22

Lesson 1 Air Quality 3/10

Lesson 2 Gases 3/22

Module 7: Fire March 31

Lesson 1 Energy 3/27

Lesson 2 Nuclear 3/31

Module 8: Water Apr. 7

Lesson 1 Chemistry and Global Awareness 4/5

Lesson 2 Molarity and pH 4/7

Module 9: Biochemistry Apr. 26

Lesson 1 Carbs 4/13

Lesson 2 Fats 4/18

Lesson 3 Proteins 4/21

Lesson 4 Nucleic Acids 4/26