# CHEMISTRY FOR THE LIBERAL ARTS

CHM 1020 (ONLINE)

3 CREDITS

**SPRING 2017** 

"In the fields of observation, chance favors only the prepared mind." (Louis Pasteur)

**ONLINE CLASS** 

**INSTRUCTOR:** Melanie Veige (email through Canvas only)

**OFFICE HOURS:** see the Syllabus page in Canvas for office hour information

COURSE TA: Yue Hu (email through Canvas or hulilis@ufl.edu)

**COURSE WEBSITE:** <a href="https://lss.at.ufl.edu">https://lss.at.ufl.edu</a>; select e-Learning in Canvas

**COURSE DESCRIPTION:** 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)

FIRST THING YOU SHOULD DO: Log into Canvas and access the course. Click on the Syllabus tab on the left hand side – once the Syllabus page completes loading, you will see every single due date for every assignment for the entire semester. You should print this page, and cross off assignments as you complete them. Also, click Modules and find the module: Settling In. Herein you will find detailed information about grading policies, important hints and tips, late policies, and more. Use the list of due dates and details of late policies (if any) to prioritize the order in which you complete assignments, if you find yourself pressed for time on a particularly hectic day or week. Lastly, for those of you on/near campus, find the Chemistry Learning Center and Broward Teaching Center, and familiarize yourself with the Academic Technology computer labs on campus, which have computers available for student use 24/7, in case you have a personal computer problem. You will also benefit immensely if you can form a study group with other students in the class. How will you find one another? You can contact other students from within Canvas – we have placed you into groups already, to limit the number of posts you view when participating in the Discussions. Questions about any of this? Post to Piazza.

PREREQUISITE KNOWLEDGE AND SKILLS: High school algebra is necessary.

COURSE COMMUNICATIONS: General course questions should be posted using Piazza in Canvas. The course TA or instructor will respond to Discussion posts within 24 h during the work week (this usually means a wait until the next weekday morning for responses to questions). Non private/personal questions send via email will be posted and answered using Piazza so all students can benefit from the response. This is the best way to manage Q&A in an online course. We're also relying on you to help each other by answering questions on Piazza when instructors/TAs aren't available (after 5 pm, on weekends, etc.).

To get the most out of Piazza, review your notification settings from within Piazza: click on the Piazza tab, then click the little gear icon next to your name in the Piazza window. You will want to review email notifications to see if another student has asked/answered a homework question you've been struggling with, or if additional information has been provided about an upcoming assignment. Before posting a question, check to see if someone else has already asked — you can sort questions by topic and/or search for a homework question or topic by typing in a search term.

I encourage you to post questions related to homework on Piazza – 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 answer you've provided, and give the precise HW question # in the title of the post. The more information you provide, the easier it is for your instructor/TA/another student to help.

Private or grade-related questions should be sent to the instructor using the mail function in Canvas. Do not email your instructor outside of Canvas – you will not receive a response.

**REQUIRED TEXT:** A significant portion of your grade stems from electronic homework associated with an ebook. You have two options for purchasing access, each of which includes an electronic copy of the text (*Chemistry in Context*, 8<sup>th</sup> ed., ACS, McGraw-Hill): **Option 1**) you may consent to have the purchase price charged to your student account (following the directions posted on the course home page in Canvas – you will be refunded the charge if you drop the course during Drop/Add); **Option 2**) you may purchase an access code for the materials at the UF Bookstore (the price may be higher at the bookstore). Note, **these are the only two places you can obtain a valid, working access code for this course**. Option 1 is time-limited; after a few weeks have passed in the course, your only option will be #2.

You can then access the course text and homework immediately by following the instructions provided under the "Settling In" heading in Canvas. If you have any questions about this process, please post to Piazza.

**ADDITIONAL REQUIREMENTS:** A computer with webcam, microphone, and speakers is required. This is for proctored exam testing with ProctorU. You should visit their website for specific technical details and requirements. You will also need a calculator capable of exponents and logarithm functions.

**PURPOSE OF COURSE:** By the end of this course it is expected that students will have a fundamental understanding of the chemistry of the major environmental threats to air and water, including ozone depletion, smog, global climate change, and others.

**INSTRUCTIONAL METHODS:** The course material is delivered via recorded lectures by your instructor, through other instructional videos (PBS, NASA, etc.), and by key readings in the text.

# **COURSE POLICIES:**

QUIZ/EXAM POLICY: Two proctored exams (both cumulative) will be administered with remote proctoring by ProctorU. It is your responsibility to register with ProctorU and reserve an exam time for the permitted dates (Exam 1: 2/27-3/3; Exam 2 (cumulative): 4/22-42/25). To register click on the ProctorU tab in Canvas. *Ensure that you are reserving for the correct course* – there are examinations for similarly numbered courses in their system that may have <u>different dates</u> available. If you fail to make a reservation sufficiently in advance, a <u>late fee</u> may be assessed by ProctorU, and you may have difficulty obtaining a desirable exam time. Failure to reserve a time slot in advance is not an acceptable reason for a make-up. If you encounter technical difficulties with ProctorU, contact ProctorU directly. If you experience any other technical issues during the exam, it is mandatory that you contact the UF Help Desk at that time.

End-of-module quizzes are delivered in Canvas. These quizzes are not proctored, but are timed, and are subject to the Honor Code. You will have 3 attempts at each quiz, with the highest score counting towards your grade in the course. When you're ready to begin, simply click the link to start! They're currently set up such that only 1 quiz is available at a given time, to prevent students from opening a quiz unintentionally. The due dates are firm. **The lowest two such quiz grades are dropped** (note, proctored exam scores are not eligible to be dropped).

Students wishing to dispute a question or asking for a correction must do so prior to 11:59 pm on the last day of term (Apr. 19<sup>th</sup>), at which time all quiz/exam grades are considered final.

MAKE-UP POLICY: The general chemistry division in the department of chemistry has a detailed document regarding conflict exams and exam absences. A conflict exam will be offered to those students with valid conflicts. It is your responsibility to identify yourself as requiring such accommodation at least one week prior to the exam. If, during the exam, you experience technical difficulties with ProctorU, the correct course of action is to contact ProctorU. If you experience technical difficulties with Canvas, contact the Help Desk immediately at 392-HELP. A ticket number will be created to log the time and nature of the problem. You must contact your instructor via e-mail within 24 h of the technical difficulty to be considered for a make-up. The ticket number will be required by your instructor should a make-up exam be requested.

# **ASSIGNMENT POLICY:**

- 1. MCGRAW-HILL: There are two electronic homework components: electronic ("Connect") homework and LearnSmart activities. The *homework* policies are: the student may attempt each assignment an unlimited number of times without penalty. Homework assignments may be submitted late, with a penalty of 10% per day late. <a href="LearnSmart assignments are submitted as-is at the due date/time">LearnSmart assignments are submitted as-is at the due date/time</a>; there are no late submissions for credit. All homework/LS assignments must be submitted by Apr. 19<sup>th</sup> at 11:59 pm at which time the scores will be considered final (note: this simply means that you will not enjoy the usual late policy for Connect HW assignments due later in the term; each assignment does have its own due date and time). The <a href="Lowest two">Lowest two</a> LearnSmart module grades are dropped. For technical issues with Connect, LearnSmart, or the SmartBook/ebook, contact McGraw-Hill for support (not the Help Desk or your instructor).
- **2. DISCUSSIONS:** The student is expected to contribute to the threaded discussions (Discussions tab in Canvas) according to the advertised timeline. **Bonus points for each discussion are available**. The bonus points cannot be applied elsewhere. See detailed information on discussion grading under the Settling In section in Canvas. There is no credit for submissions made more than 24 h after their posted due date/time, as all discussion assignments are available well in advance of their due dates. For the highest success rate in posting: 1) do not wait until too close to the 11:59 pm deadline if your clock reads 11:55, the actual time may be a few minutes later; 2) don't click the back button in your browser after posting; 3) double-check to make sure your submission was successful navigate back to the course home page, then navigate to the discussion

and scroll down on your discussion page to ensure your post looks the way you'd like it to. For technical help, contact the Help Desk. **The <u>one</u> lowest discussion grade is dropped**.

- 3. WRITTEN ASSIGNMENTS: The student will compose two written assignments, variously incorporating data collection, data tabulation, graphing, written response, and conclusion formulation. Full assignment descriptions can be found using the "Assignments" tab in Canvas. Assignments must be submitted as directed to Canvas as a .pdf to be considered for credit emailed submissions to the instructor will not be considered for any credit. No grades from this category are dropped.
- **4. GROUP ASSIGNMENTS:** The student will contribute to group projects see the "Assignments" tab and the information provided under "Settling In"; those not wishing to work with a group can complete the assignment individually. Each group member receives the same grade ensure that each contributor's name is on the final submission(s). Your groups are automatically created within Canvas, or you can create your own group. See the grading rubrics for specific details of each assignment. **No grades from this category are dropped.**

COURSE TECHNOLOGY: The student may require Adobe Acrobat Reader, Adobe Flash Player, Microsoft Silverlight and other software; there are free tutorials on many software applications you may encounter on Lynda.com. All UF students are expected to have reliable access to a computer; suggested configurations may be found here: <a href="https://training.helpdesk.ufl.edu/computing.shtml">https://training.helpdesk.ufl.edu/computing.shtml</a>. ProctorU has specific hardware/software requirements: <a href="http://www.proctoru.com/tech.php">http://www.proctoru.com/tech.php</a>. Check the <a href="McGraw Hill technical support page">McGraw Hill technical support page</a> to ensure you have the necessary plugins to complete the assignments.

# **UF POLICIES:**

UNIVERSITY POLICY ON ACCOMMODATING STUDENTS WITH DISABILITIES: Students requesting accommodation for disabilities must first register with the Dean of Students Office (<a href="http://www.dso.ufl.edu/drc/">http://www.dso.ufl.edu/drc/</a>). The Dean of Students Office will provide documentation to the student who must then provide this documentation to the instructor when requesting accommodation. You must submit this documentation prior to submitting assignments or taking the quizzes or exams. 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:** Academic honesty and integrity are fundamental values of the University community. Students should be sure that they understand the UF Student Honor Code at http://www.dso.ufl.edu/students.php.

**NETIQUETTE: COMMUNICATION COURTESY:** All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats. <a href="http://teach.ufl.edu/wp-">http://teach.ufl.edu/wp-</a>

content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf

# **GETTING HELP:**

For issues with technical difficulties in Canvas, please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP select option 2
- https://lss.at.ufl.edu/help.shtml

\*\* Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from LSS when the problem was reported to them. The ticket number will document the time and date of the problem. You MUST e-mail your instructor within 24 hours of the technical difficulty if you wish to request a make-up.

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
- Library Help Desk support

Should you have any complaints with your experience in this course please visit <a href="http://www.distance.ufl.edu/student-complaints">http://www.distance.ufl.edu/student-complaints</a> to submit a complaint.

# **GRADING POLICIES:**

Should a student wish to dispute any grade received in this class (other than simple addition errors), the dispute must be in writing and be submitted to the instructor within <u>72 h</u> of receiving the grade (within <u>24 h</u> for the final exam).

#### **GRADE DISTRIBUTION:**

- 1. McGraw-Hill Connect Homework (10%); the two lowest scores are dropped
- 2. LearnSmart (10%); the two lowest scores are dropped
- 3. End of module guizzes (20%); the two lowest scores are dropped
- 4. Proctored Exam 1 (18%) and Exam 2 (18%)
- 5. Discussions (6%); the lowest score is dropped
- 6. Written Assignments (2 @ 4% = 8%)
- 7. Group Assignments (2 @ 4% = 8%)
- 8. Syllabus Quiz, Quiz about Exam Policies; Survey (2% total)

### **GRADING SCALE:**

| Α   | A- | B+ | В  | B- | C+ | С  | C- | D+ | D  | D- | E   |
|-----|----|----|----|----|----|----|----|----|----|----|-----|
| 88% | 85 | 81 | 78 | 75 | 71 | 68 | 65 | 61 | 57 | 55 | <55 |

For more information:

https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx#hgradeshttp://www.isis.ufl.edu/minusgrades.html

# **General Education:**

This course satisfies the General Education requirement in the Physical Sciences.

### PHYSICAL SCIENCE GENERAL EDUCATION PROGRAM OBJECTIVES:

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.

These objectives are accomplished through participation in the course lectures and discussion sections, and individual work done on homework assignments and assessments.

# **GENERAL EDUCATION STUDENT LEARNING OUTCOMES:**

| Area              | Institutional Definition  | Institutional SLO   |  |  |  |  |
|-------------------|---|---|--|--|--|--|
| CONTENT           | Content is knowledge of the concepts, principles, terminology and methodologies used within the discipline. | •   |  |  |  |  |
| COMMUNICATION     | •   | Students communicate knowledge, ideas, and reasoning clearly and effectively in written or oral forms appropriate to the discipline.                            |  |  |  |  |
| CRITICAL THINKING |   | Students analyze information carefully and logically from multiple perspectives, using discipline specific methods, and develop reasoned solutions to problems. |  |  |  |  |

Naturally, all three areas of learning outcomes will be assessed in all categories of graded assignment administered in CHM1020.

### **COURSE STUDENT LEARNING OBJECTIVES:** The student will:

- Demonstrate an understanding of basic chemical concepts, including classification of matter.
- Gain an understanding of the vocabulary of chemistry, which permeates society
  on food and product labels, in regards to pollution and climate change, and in
  the discussion of sustainable energy.
- Demonstrate the ability to apply chemistry-centered mathematical concepts effectively to real-world solutions; for example, calculating Calories in an item of food, and using half-life to assess potential dangers of radioactive isotopes.
- Communicate scientific findings clearly and effectively using oral, written or graphic forms.
- Distill and analyze information from multiple perspectives, including that
  presented in tabular or graphic format. The student will apply logical reasoning
  skills in this task.
- Describe the chemistry of the major environmental threats to air and water, including ozone depletion, smog, global climate change, groundwater pollution, and energy production.

<u>Disclaimer:</u> 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. You should check the Syllabus in Canvas periodically for changes – the most up to date version will be posted there.