

-- Course Syllabus --

Instructor

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Office Hours (Online): See Canvas for times and Zoom links.

Graduate Instructional (Teaching) Assistants (TIAs)

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Office Hours (Online): See Canvas for times and Zoom links.

Undergraduate Study Group Leader

Hans Ng ([Pronouns](#): He/Him/His) ✉ hng@ucsd.edu

Lectures and Discussions (Remote/Synchronous Times*)

6C Section B00 ZOOM Flipped Lecture/Q&A: https://ucsd.zoom.us/j/755366971				
Monday, Wednesday, Friday 1-1:50 PM				
6C ZOOM Discussion Sections				
8402	B01	Friday, 8:00-8:50 AM	Link TBA	TA Aaron Ward
8403	B02	Friday, 9:00-9:50 AM	Link TBA	TA Aaron Ward
8404	B03	Friday, 10:00-10:50 AM	Link TBA	TA Aaron Ward
8406	B05	Friday, 12:00-12:50 PM	Link TBA	TA Aashish Shivkumar
8407	B06	Friday, 3:00-3:50 PM	Link TBA	TA Aashish Shivkumar
8408	B07	Friday, 4:00-4:50 PM	Link TBA	TA Alex Mantanona
8409	B08	Friday, 5:00-5:50 PM	Link TBA	TA Alex Mantanona
8410	B09	Friday, 6:00-6:50 PM	Link TBA	TA Alex Mantanona
8405	B04	Friday, 7:00-7:50 PM	Link TBA	TA Aashish Shivkumar

Please attend the section in which you are registered, unless it is an issue because of your time zone.

OTHER FACULTY FOR CHEM 6C SP20 COURSE SECTIONS: Professors Galia Debelouchina (A00), Tin Y. Lam (D00), Dontaire Stallings (E00, F00). **6C lecture sections are not interchangeable.**

Academic Achievement Hub Remote Services

- **Remote Study Group Sessions** for our CHEM 6C B00 section: Monday, 7:00-8:00 PM <https://aah.ucsd.edu/supplemental-instruction-study-group/study-group-schedule.html>
- **Online Content Tutoring** is available Mondays-Thursdays, 12:00-9:00 PM, Fridays 12:00-7:00 PM <https://commons.ucsd.edu/students/math-chemistry-tutoring/index.html>
- **Remote Learning Strategies Workshops** - <https://aah.ucsd.edu/learning-strategies/index.html>
- **OASIS Math and Science Tutorial Program** - <http://oasis.ucsd.edu/>

Teaching and Learning Remotely

As a result of the COVID-19 global pandemic, all instruction at UC San Diego is taking place remotely this Spring Quarter. The campus has made available a number of resources to help students transition to this new learning and teaching environment. Please see keeplearning.ucsd.edu. While the course format has changed, its educational quality and goals to inspire, enlighten, and connect communities of learners and teachers has not!

Course Description

CHEM 6C is the third course of a three-quarter general chemistry sequence for science and engineering majors, as well as pre-professionals in health-related studies. The primary goals of this curriculum are for you to understand the nature of science through the perspective of this central field; to develop a firm grounding in the chemical language, principles, and applications that underlie our physical and biological world, and that may serve as a foundation for understanding the molecular underpinnings of the chemical sub-disciplines, as well as the related fields of biology, medicine, materials science, and engineering; to cultivate independent learning and the intellectual skills needed to pose good questions, evaluate problems systematically, construct logical arguments, and convey ideas effectively; and to promote an appreciation of chemistry in contemporary society and issues of both local and global contexts. More specifically, our discussions will focus on *aqueous ionic equilibria, thermodynamics, electrochemistry, chemical kinetics, nuclear reactions, and a selection of topics from main group and transition metal chemistry*. Chemistry 6A and 6B (or the equivalent), and a foundation in mathematics (10A, 20A or higher) are important **pre-requisites/co-requisites**. *4 credits*.

Learning Outcomes (LOs) are highlighted weekly in lectures and discussion sections. *See also the comprehensive list of course-level LOs on Canvas (under the Learning Outcomes module).*

Generally, this course will stress scientific reasoning, which is often counterintuitive and different from ways of thinking that we use in everyday life. Because most entities at the particulate level cannot be directly observed, chemists have developed a shared language of technical vocabulary and representations including diagrams, graphs, drawings, equations, and other symbols that convey meaning. You will be expected to use these to make claims based on evidence and scientific reasoning, solve problems (both quantitative and qualitative), write explanations of chemical phenomena, interpret and analyze data, and interpret and construct representations.

Learning Resources: Materials and Media

Website: The course web site is **canvas.ucsd.edu**. **Canvas** is the standard UC San Diego method for distribution of lecture notes, grades, exam answer keys and general information. *It is your responsibility to check this site daily as it will be our primary means of communication.*

Zoom: UC San Diego offers free Zoom accounts for all students. For information on how to set up your account, access meeting links, participate in sessions, and view recordings, see: <https://digitallearning.ucsd.edu/learners/learning-remotely/tools.html#Get-started-in-Zoom>

GroupMe: This free mobile group messaging app can be downloaded to your phone (<https://groupme.com/en-US/>). We will assign students to a group (based on time zones) to enable members of the class to stay connected.

Text: Donald A. McQuarrie, Peter A. Rock, and Ethan B. Gallogly, **General Chemistry**, 4th Edition, University Science Books. (2010).

See: <http://www.mcquarriegeneralchemistry.com/>. This website contains some useful information including a Student Solutions Manual, Solution to Textbook Practice Problems, and Web Links—and it's free!

The following chapters will be discussed in *CHEM 6C*:

- 21. Buffers and the Titration of Acids and Bases
- 22. Solubility and Precipitation Reactions
- 23. Chemical Thermodynamics
- 24. Oxidation-Reduction Reactions
- 25. Electrochemistry
- 17. Chemical Kinetics: Rate Laws
- 18. Chemical Kinetics: Mechanisms
- Interchapter O: Radiochemistry
- 26. The Chemistry of the Transition Metals
- Interchapter I: The Main Group Metals

You may also wish to consult other general chemistry texts to read different explanations or attempt other practice problems.

SAPLING Online Homework System: All homework will be assigned, performed, and graded on the site saplinglearning.com, which also offers access to the e-textbook (at an extra cost). If you are not registered with SaplingLearning, you will need to create an account and pay for access (see Single Sign On and other instructions listed under the “Homework” tab of our Canvas course website). **A separate notebook for doing homework problems and keeping a record of your work is highly recommended.**

Calculator: An inexpensive, non-graphing, non-programmable scientific calculator capable of scientific notation, logarithms, and basic arithmetic (see Policies). Among acceptable calculator models are the Texas Instruments TI-30X series, or Hewlett Packard (HP) 10S or 30S.

For course-related e-mails: Please use your UCSD e-mail and include CHEM 6C in the subject title.

Course Community and Approach: InterACTIVE Teaching + Learning

Welcome to our REMOTE CHEM 6C class! This course will comprise a series of instructor-led asynchronous lectures, followed by synchronous interactive Q&A sessions (three times per week) and end-of-week TA-facilitated collaborative problem-solving discussions.

A Note About Lectures:

Asynchronous "Lectures": These will be videotaped and posted to Canvas, along with lecture slides, in advance of the regularly scheduled lesson. Each lesson will be sub-divided into shorter videos based on key questions and learning goals.

- Make every effort to watch the set of videos before you attend the live sessions.

Synchronous "Problem-Solving Sessions": Live instructor-led Q&A sessions will be held via Zoom at the regularly scheduled lecture times (MWF 1-1:50 PM PST). **NOTE: These sessions will be recorded and made available to all students asynchronously.**

- Arrive prepared to participate! Bring with you any questions from text-book readings you've completed and the videos you've watched. Have on hand a calculator and note-taking device.

A Note About Discussion Sections:

All sections will be conducted remotely via the Zoom platform at the regularly scheduled times. **NOTE: These sessions will be recorded and made available to all students asynchronously.** Each 50-minute session is a valuable opportunity for you to practice, communicate, and receive feedback -- in a low-stakes, supportive environment. Problem sets/worksheets for each topic are posted under the “Discussion Materials” tab of Canvas.

- Have available to you a copy of the weekly problem set, your calculator, and class notes. Expect to be given an assigned role during ‘Breakout’ problem-solving periods.

Collectively, these sessions are designed to help you engage actively in the learning process, to develop your abilities to analyze and apply your chemical knowledge, and to encourage peer discussion and feedback. Additionally, you will use the SAPLING online homework system to guide you along a personal learning trajectory that emphasizes problem-solving and other skills building. These homework sets are in no way limiting; you are encouraged to work through additional chapter problems as well as the weekly discussion worksheets. Learning can sometimes be an uncomfortable process, as we challenge and set aside old ways of thinking and grapple with problems and ideas that we do not yet understand. So please remember that you have my full support, as well as that of the rest of the instructional team (TIAs and SG leader). I encourage you to take full advantage of instructor and TA office hours and optional tutoring resources, and to form early and meet regularly with a peer study group. **Together let's build a strong, cohesive, and dynamic ONLINE learning environment that supports each student's development and success in this class and at this University.**

To create such a supportive learning community requires, we ask that all class members:

- make every effort to prepare for lectures and discussion sessions;
- engage fully in class activities;
- act honestly and ethically; and
- treat others with respect and kindness in all online environments.

Your participation and feedback are important to the success of the course and we welcome your thoughts throughout the quarter on how we might improve class processes that will encourage collegial communications and a positive and productive academic environment.

Evaluation of Student Performance

Your final course grade will be based on the following work and assessments:

Weekly Participation: In addition to pre- and post-course surveys, you will be asked to complete a set of reflective exercises (surveys) each week. These formative assessments are intended to help you stay on schedule and develop your learning strategies. They will comprise 10% of your course grade.

Pre-readings and Homework: Keeping with the pace of assigned readings and lectures, online homework must be completed using the *SAPLING LEARNING* system before the noted deadlines. Each HW assignment will consist of ~15-20 problems with a TOTAL value of 100 points. **Late submissions will be penalized 10% per day.** Prior to the due date, students will be allowed 5 attempts per question (with a small point penalty for each incorrect answer). You may use as resources a periodic table, equation sheet, your notes and text, and even print out and complete each assignment off line (before you enter in your answers online), but all work submitted for a grade must be the product of your own understanding and effort. In the computation of your final course grade, your lowest weekly HW score will be dropped before the points you accrue are summed and divided by a 8-week total (of 800 points) to yield a (maximum) score out of 15%.

Capstone Project: A “chemistry in context” project will constitute 25% of your final grade. The project is intended: to introduce you, at an early stage in your university education, to the scientific literature, including the skills required to search and assess both printed and electronic resources; and to engage you in the application of chemical concepts from *CHEM 6A(H)-6B(H)-6C(H)* to broader contexts and a contemporary, real-world issue of particular interest to you. The project will be completed in **3-stages** as you: (1) Learn about the research process via online tutorials and in-class exercises (5%, Weeks 1-4, & 6); (2) Select your topic and conduct a preliminary literature search (8%, Week 5); and, (3) Compose and submit your research essay (written, video or other creative format) (12%, Weeks 7-10). A full description of the project (and associated deadlines) is available on Canvas.

Exams: Four exams will be administered during the quarter: three equally weighted quizzes (*at the end of Weeks 3, 6, and 9*), and a cumulative final exam. Lecture material, assigned readings, problem sets and online homework will serve as the basis for exam questions, which will be both qualitative (concept-based) and quantitative (calculation- or model-based) in nature. **Review sessions will be scheduled in advance of all exams.**

GRADE SUMMARY: There will be **no** extra credit.

Weekly Participation	10%
Weekly homework (best 8 of 9 assignments)	15%
Capstone Project	25%
Tutorials	5%
Literature Search Exercise	8%
Research Essay/Video	12%
Online Quizzes (best 2 of 3, 12.5% each)	25%
Comprehensive Concept Map & Final Exam	25%

Important Course and University-Wide Policies

Determination of Course Grade: An **absolute, criterion-referenced** (rather than *relative*) grading system is applied in this course. It is intended that course grades reflect mastery of specific knowledge and skills, as delineated by the learning outcomes emphasized in lectures, sections, and homework. A student can calculate their grade *at any time* during the academic quarter using the scheme outlined above, and the performance scale below. The letter grade for the course will be determined after the final scores have been tabulated. As a rough guide, the following letter grade assignments will be used: A (87% and above); B (72-86%); C (60-71%); D (50-59%); F (< 50%). Plus (+) and minus (-) grades will be awarded. Any grade adjustments will be made by the instructor, not a TA, at the end of the quarter. **NOTE: For SP20 quarter only, the campus has extended the deadline to change grading option and units to Friday of week 10 – June 5th.**

Absences: There will be **NO make-up exams**. If you should miss one quiz, or chose not to take one test, or for personal or health-related reasons cannot take one test, it is this test score that will be dropped.

Re-grades: **All graded materials should be examined immediately upon return.** If there appears to be an error in grading of any course material, please contact your TA or the Instructor. **Requests for re-grading must be received within one calendar week of the return of the graded item;** grade adjustments will not be made after this time. Point additions do not constitute re-grades and may be turned in for consideration any time before the end of Week 10.

Examinations: A comprehensive list of test-taking policies will be distributed prior to each quiz/exam.

UCSD Policy for Final Exams: **A student must take the final exam in order to receive a grade for a course.** If you have an “official conflict” that prevents you from taking the exam at the regularly scheduled time, see the Instructor immediately. If you miss, or expect to miss the final exam for any other reason, you must petition for the grade of I (Incomplete), which can only be granted under special circumstances (for example, documented illness).

Academic Integrity: “Integrity of scholarship is essential for an academic community.” The University expects that both faculty and students will honor this principle and in so doing protect the validity of our intellectual work. As a Course Instructor, I am committed to upholding the integrity of students’ efforts, by being explicit with course expectations and policies, and by reducing opportunities for academic misconduct. In turn, it is the responsibility of each student to fully engage in the class and its related assignments for the purpose of learning, to complete all academic work in the manner expected, and to inform me of suspected instances of academic misconduct by peers.

The Policy on Integrity of Scholarship (see link below) and this syllabus list some of the standards by which you, as a student, are expected to complete your academic work. In short, **“No student shall engage in any activity that involves attempting to receive a grade by means other than honest effort.”** Dishonesty includes, but is not limited to: knowingly procuring, providing, or accepting any unauthorized material that contains questions or answers to any examination or assignment to be given at a subsequent time; plagiarizing or copying the work of another person; allowing others to copy from you; completing in part or in total any test or assignment for another person; employing forms of communication or aids – such as cheat sheets or information loaded into a calculator or other electronic device - excluded by the instructor in undertaking any course work; claiming credit for work that has been altered after grading, or submitted in another class. **These policies apply to all forms of coursework and assessments – personal response systems (clickers), online homework, quizzes, and exams.**

In accordance with university policy (see: <http://www-senate.ucsd.edu/manual/appendices/app2.htm#AP14>), all cases of suspected integrity violations will be reported to the Academic Integrity Office. Students found to have committed academic misconduct will face administrative sanctions imposed by their College Dean of Student Affairs and academic sanctions imposed by me, the Course Instructor. *Standard administrative sanctions include the creation of a disciplinary record (which will be checked by professional and graduate schools), attendance at a AI Seminar, academic probation and possible suspension or dismissal from the university. Academic sanctions can range from an F on an assignment or exam to an F in the class.*

Academic Accommodations: **Please notify the instructor immediately (and no later than the end of Week 2 of instruction)** if you require classroom or exam accommodations. Students requesting accommodations must provide the appropriate documentation: in the case of a disability, a current

Authorization for Accommodation (AFA) letter issued by the UC San Diego Office for Students with Disabilities (OSD); for anticipated travel conflicts associated with student athletics, an official class absence notification letter from UCSD's Faculty Athletics Representative (FAR); and for a bona fide religious conflict, a written statement (including religious affiliation) by the student. *All requests for accommodations must be received at least 5 days prior to an exam.*

Additional Course and Campus Resources

Undergraduate Student Affairs, Department of Chemistry & Biochemistry

E-mail: chemadvising@ucsd.edu

Geisel Library, <https://library.ucsd.edu>

E-mail: LibraryBorrowing@ucsd.edu

Your Well-being: Throughout your time at UC San Diego, and particularly during this COVID-19 pandemic, you may experience a range of issues, including illness, housing or food insecurity, strained relationships, death, other losses or traumas, and more. These may induce stress, sadness, anxiety, and loss of motivation, and in turn, lead to diminished academic performance and affect your ability to fulfill professional responsibilities and/or participate in day-to-day activities. In order to support you during such challenging times, the university provides a number of resources, including:

- Counseling and Psychological Services (858-534-3755 | caps.ucsd.edu)
- Student Health Services (858-534-3300 | studenthealth.ucsd.edu)
- CARE at the Sexual Assault Resource Center (858-534-5793 | care.ucsd.edu)
- The Hub Basic Needs Center (858-246-2632 | basicneeds.ucsd.edu)

Help is always available. Please never hesitate to reach out.

Tips for Success in CHEM 6C

It is important to develop and maintain a weekly study plan that includes time for reading, lectures, discussion (and SI and/or OASIS) sessions, additional problem-solving practice (individual and with peers), and homework. Here are a few learning strategies that can support your success in this remote course:

- Engage in active, selective and critical reading before and after you view the asynchronous lecture videos (NOTE: Reading assignments will be posted on Canvas).
- Watch the pre-recorded video lectures, take notes, and write down questions you have.
- Participate in the synchronous class meetings; bring your questions, share your ideas with your peers and take further notes.
- Review your notes immediately after each class. If you need clarification(s), re-read the corresponding sections of the textbook, and/or come to office hours, post your question(s) on Canvas, or have them addressed by me (the Instructor) or the TAs before/after the next lecture. **Don't wait!** Because chemistry is cumulative, your ability to assimilate new material requires that you have a robust understanding of earlier concepts.
- Attend and participate in your weekly discussion section; it is your principle means for outside help and smaller-group interactions. In section, your TA will review questions from the lectures and readings, and work with you on problems similar to those on the homework and exams.
- Although reading is important, do not confuse it with studying or comprehending the material. Your knowledge and understanding will be tested and developed through problem solving. (*"There is no other way to learn chemistry than to practice it (H. Sevian)"*). So don't procrastinate - allow yourself time each week to complete the online homework.
- Use SAPLING LEARNING as a study tool; not only is it designed to help you learn the material and to identify and fill in gaps in understanding, but it can be used to review regularly key concepts.
- Need additional practice? Tackle the suggested textbook problems (see list on Canvas); check your work using the detailed answers provided in the Student Solutions Manual (see the textbook web page).

- Attend office hours (we'll have between 8-10 hrs of online office hours each week, in both the AM and PM) – bring your questions or come and listen to other student's questions.
- Study regularly with others outside of class. In order to explain a concept or idea to someone else, you must understand it first.
- Practice effective exam review strategies; using the learning objectives as your checklist, look over your lecture notes, discussion worksheets, and homework sets. Identify and attend to gaps in understanding well in advance of a scheduled exam (i.e. not the night before!). Invest your time in practicing the application of concepts and problem-solving approaches that you find particularly challenging. Test yourself by taking practice exams and providing explanations to others.
- Beware of practices that promote "illusions of competence" (i.e. cause you to overestimate your knowledge and skills):
 - Watching a TA or course instructor solve a problem (rather than doing it yourself);
 - Glancing at the solution to a problem and believing you know how to do it (rather than attempting a similar problem again);
 - Practicing a problem type or technique at which you are already adept – "simply because it's easy and it feels good to successfully solve problems" (Oakley, 2014) – while avoiding other problems or techniques that you've yet to master;
 - Re-reading material (rather than recalling and applying concepts); Highlighting and underlining a text (rather than writing brief notes that synthesize key concepts, etc.)
- Seek to discover what you need to do differently when the feedback you receive on your work is not what you hope for.
- Develop a schedule that allows time for both the demands of this course and the other important things in your life.
- ***If you find yourself falling behind or getting discouraged, please reach out to me (the Course Instructor) and/or to the TAs so that we can assist and support you in reaching your goals.***

Ultimately, chemistry is happening all around us – impacting our daily lives in ever-increasing ways. As citizens, it is important that we understand how science and scientists work, so that we are able to judge the risks and enjoy the benefits of scientific advances, as they pertain to our personal, professional, or civic experiences. The intellectual skills you develop this quarter should allow you to share in "the adventures of (the chemical) science" far beyond the realm of this course, and regardless of your current or future pursuits.

Course Schedule

On the last page is the course schedule. Be sure to enter all important dates into your calendar. Note that the schedule is subject to change to accommodate the needs of the class. Any changes in topics or dates will be announced in lecture and via CANVAS.

Suggested Deadlines:

- **Chemical Information Literacy (CIL)** assignments designated with an asterisk (*) are videos or online tutorials that may be accessed through Canvas. This is a suggested completion schedule only – you can complete these assignments anytime during the term.

Fixed but Flexible Deadlines:

- **Weekly Surveys** are due by 11:00 PM each Sunday. These may be submitted up to 7 days from their release (Fridays).
- **Sapling Homework (HW)** must be completed by 11:00 PM on the designated Wednesday. One extension may be requested without explanation.
- **Capstone Literature Search, Essay Draft, Peer Review and Final Project** dates are set.
- **Quizzes** will be activated online over a 12-hr. period (9 AM – 9 PM PST) on the given Fridays, but will have a fixed duration (details to be released by Week 3).
- **Final Exam date** must adhere to that set by the Registrar's Office. The time will be aligned to student's current time zone.

Course Schedule (continued)

	Date		Lecture Topic	Readings	Assignment Deadlines
Week 0	Online	***	Course Introduction (Part 1)	--	<i>Prior to each lecture, please complete assigned readings.</i>
Week 1	(M) Mar. 30	1	Course Introduction (Part 2)	Review 6A&B	Sapling HW#0 (Optional)
	(W) Apr. 1	2	Acid-Base Buffer Systems	Ch. 21	
	(F) Apr. 3	3	Acid-Base Buffer Systems	Ch. 21	CIL#1 Library Tour and CIL#2 Story of Research* (Allow 10 min. to complete) Weekly Canvas Survey
Week 2	(M) Apr. 6	4	Acid-Base Titrations	Ch. 21	
	(W) Apr. 8	5	Acid-Base Titrations	Ch. 21	Sapling HW#1
	(F) Apr. 10	6	Solubility & Precipitation Reactions	Ch. 22	CIL#3 Search Strategies* (Allow 30 min. to complete) Weekly Canvas Survey
Week 3	(M) Apr. 13	7	Solubility & Precipitation Reactions	Ch. 22	
	(W) Apr. 15	8	The 2 nd Law of Thermodynamics	Ch. 23	Sapling HW#2
	(F) Apr. 17	9	Entropy and Entropy Changes	Ch. 23	CIL#4 Parts of an Article* (Allow 30 min. to complete) Weekly Canvas Survey
	(F) Apr. 17	***	QUIZ 1 (Online)	Lectures 1-7	
Week 4	(M) Apr. 20	10	Entropy and Entropy Changes	Ch. 23	
	(W) Apr. 22	11	Entropy, Free Energy, and Work	Ch. 23	Sapling HW#3
	(F) Apr. 24	12	Free Energy and Equilibrium	Ch. 23	CIL#5 Evaluating Sources (Allow 30 min. to complete) Weekly Canvas Survey
Week 5	(M) Apr. 27	13	Redox Reactions: A Balancing Act	Ch. 25	
	(W) Apr. 29	14	Electrochemical Cells	Ch. 25	Sapling HW#4
	(F) May 1	15	Half-Cell and Cell Potentials	Ch. 25	Capstone – Literature Search Weekly Canvas Survey
Week 6	(M) May 4	16	Half-Cell and Cell Potentials	Ch. 25	
	(W) May 6	17	Nernst Equation	Ch. 25	Sapling HW#5
	(F) May 8	18	Electrolysis and Other Applications	Ch. 25	CIL#6 Citations/Plagiarism* (Allow 20 min. to complete) Weekly Canvas Survey
	(F) May 8	***	QUIZ 2 (Online)	Lectures 8-16	
Week 7	(M) May 11	19	Chemical Kinetics: Rate Laws	Ch. 17/18	
	(W) May 13	20	Integrated Rate Laws	Ch. 17/18	Sapling HW#6
	(F) May 15	21	Chemical Kinetics: Mechanisms	Ch. 17/18	
Week 8	(M) May 18	22	Chemical Kinetics: Mechanisms	Ch. 17/18	Capstone – Essay (Draft)
	(W) May 20	23	Chemical Kinetics: Theories	Ch. 17/18	Sapling HW#7
	(F) May 22	24	Nuclear Decay and Activity	Interch. O	Capstone – Peer Review Weekly Canvas Survey
Week 9	(M) May 25	**	No Class: Memorial Day Holiday		
	(W) May 27	25	Nuclear Decay and Activity	Interch. O	Sapling HW#8
	(F) May 31	26	Nuclear Chemistry - Applications	Interch. O	Weekly Canvas Survey
	(F) May 31	***	QUIZ 3 (Online)	Lectures 17-24	
Week 10	(M) June 1	27	Properties of <i>d</i> -Block Elements; Coordination Compounds	Ch. 26	
	(W) June 3	28	Coordination Compounds: Isomerism	Ch. 26	Capstone – Essay (Final)
	(F) June 5	29	Crystal Field Theory	Ch. 26	Weekly Canvas Survey
FINALS Week	(M) June 8		No Classes		Sapling HW#9
	(Th) June 11		Final Exam (11:30 AM-2:30 PM,	Comprehensive	