



Elementary Chemistry

The University of Toledo

College of Natural Sciences and Mathematics

Department of Chemistry and Biochemistry, Chem1090 - 001-018

CRN 24165, 14315,10720,14317,24166,15803,10724,14319

Sections 001-012

Instructor: Dr. Elizabeth Zhurova
Email: Elizabeth.Zhurova@UToledo.edu
Office Hours: TR 3:50-5:00 PM, W 4:00-6:00 PM
or by appointment
Office Location: BO2096G
Offered: Spring 2022

Course Website: [Blackboard Learn](#)
Lecture Location: WO1201
Lecture Day/Time: T, R 2:30 – 3:25 PM
Recitation Location: Varies (see your schedule)
Recitation Day/Time: Wednesday (see your schedule)
Credit Hours: 3

Sections 013-018

Instructor: Dr. Elizabeth Zhurova
Email: Elizabeth.Zhurova@UToledo.edu
Office Hours: TR 3:50-5:00 PM, W 4:00-6:00 PM
or by appointment
Office Location: BO2096G
Offered: Spring 2022

Course Website: [Blackboard Learn](#)
Lecture Location: WO1201
Lecture Day/Time: T, R 5:45 – 6:40 PM
Recitation Location: Varies (see your schedule)
Recitation Day/Time: Varies (see your schedule)
Credit Hours: 3

CATALOG/COURSE DESCRIPTION

For students who major in science, engineering or other fields which require chemistry as a prerequisite subject, who have not had a previous course in chemistry and whose preparation is not sufficient to begin General Chemistry (CHEM 1230).

PREREQUISITES AND COREQUISITES

[MATH 1200](#) with a minimum grade of C, or [MATH 1320](#) with a minimum grade of C, or [MATH 1340](#) with a minimum grade of C, or [MATH 1750](#) with a minimum grade of C, or [MATH 1830](#) with a minimum grade of C, or [MATH 1850](#) with a minimum grade of C, or ACT Math with a score of 20, or Aleks Math Placement Test with a score of 046, or Math - Coll Algebra Placement with a score of 10, or SAT Mathematics with a score of 480, or MATH SECTION SCORE with a score of 510.

In order to succeed in Elementary Chemistry, your Math background should be sufficient. If you are not comfortable *solving linear equations* and *working with exponential numbers*, please contact your instructor as soon as possible. Extra help in the form of online tutoring and SI sessions is available in the class (see below).

TEACHING METHODOLOGY

Lecture sessions will be taught face-to-face in the classroom as scheduled. Lectures are designed to clarify concepts and provide examples of what is expected of each student. Attendance and participation are required in order to succeed in the class.



Textbook is an important part of this course. The sections to be read are listed on the attached daily schedule. I recommend that you *read the text before the lecture*.

iClicker Polling. In lecture class you will use a personal web enabled device (laptop, tablet, smart phone) to answer questions for credit. A license is required for all types of devices to be used. *I recommend you to use the link listed below to purchase the license.* You need to set up an iClicker account and register for the iClicker course associated with your lecture section number.

Recitation. Recitation sessions are **required** parts of the class, consisting of one meeting per week on the same day at the same time/place. The recitation period you are enrolled in corresponds to a specific section number; the day/time/place is listed on your schedule (Note: some schedules list the recitation period as “lab”, this is not a lab). Your recitation instructor will answer questions and ask you to the board to work the assigned homework problems. Most recitations are taught by Teaching Assistants (TAs). **Complete the assigned end-of-book-chapter recitation homework problems on paper before each recitation session.** You will be told in lecture which problems to complete each week. All recitation classes meet in face-to face format.

ALEKS (Assessment and LEarning in Knowledge Spaces) **online homework** system is designed to create assignments tailored to the unique needs of each student. It is based on *artificial intelligence*. The first time you log in, ALEKS will ask series of questions designed to assess exactly what you do and do not know about Math and Chemistry. After this initial assessment, you will have a list of topics to work through based on what you are ready to learn. *ALEKS will not ask you to work on material you already know, nor will it ask you to work on advanced material until you are ready to do so.* All ALEKS homework assignments have deadlines, usually twice a week - on Wednesdays and Sundays at midnight (see ALEKS syllabus for more detailed information). **Please include 2-3 hours, 2-4 times a week of ALEKS work into your schedule.** Please refer to ALEKS privacy policies at <https://www.mheducation.com/privacy.html>

TEXTS AND ANCILLARY MATERIALS

1. Properly functioning **computer with Internet access**.
2. **Book:** ISBN-10: 1319333486, ISBN-13: 9781319333485, David Goldberg, Fundamentals of Chemistry, UT ed., 2019 (the original book ISBN-10: 0072828501, ISBN-13: 9780072828504, David Goldberg, Fundamentals of Chemistry, 5th Ed., 2007 can also be used).
3. **ALEKS** online homework is a part of Inclusive Access program, and *you already paid for ALEKS subscription*. It is available to you through Blackboard.
4. **iClicker** license.
5. Non-programmable, non-graphical scientific **calculator**.

A **package** containing hard copy book, access card for e-book (same book) and iClicker code is available through **UT bookstore**.

E-book and iClicker subscription can be also purchased here: <https://store.macmillanlearning.com/us/storefront/202106979>
If you use this link to purchase your subscription, you get a special cheaper deal for our class. If you are taking another class that is using iClicker, only one iClicker subscription is needed for all your classes.

If you cannot afford the book at this time, Carlson Library at UT main campus has several hard copy books on reserve. These books can be checked out for 2 hours at a time for an exchange of ID.



TECHNOLOGY REQUIREMENTS

Browser Check Page

Students need to have access to a properly functioning computer throughout the semester. The Browser Check Page <http://www.utoledo.edu/dl/helpdesk/browser-check.html> will enable you to perform a systems check on your browser, and to ensure that your browser settings are compatible with Blackboard, the learning management system that hosts this course.

Software

Student computers need to be capable of running the latest versions of plug-ins, recent software and have the necessary tools to be kept free of viruses and spyware. The computer needs to run the following software, available in the UT Online Download Center.

- Word Processing Software
- Adobe Acrobat Reader
- Java Plugin Console
- Adobe Flash Player
- Adobe Shockwave Player
- Google Chrome Browser – Recommended

Internet Service

High-speed Internet access is recommended, this course does contain streaming audio and video content.

Use of Public Computers

If using a public library or other public access computer, please check to ensure that you will have access for the length of time required to complete tasks and tests. A list and schedule for on-campus computer labs is available on the Open Lab for Students webpage.

UT Virtual Labs

Traditionally, on-campus labs have offered students the use of computer hardware and software they might not otherwise have access to. With UT's Virtual Lab, students can now access virtual machines loaded with all of the software they need to be successful using nothing more than a broadband Internet connection and a web browser. The virtual lab is open 24/7 and 365 days a year at VLAB: The University of Toledo's Virtual Labs.

Learner Technical Support can be found here <http://www.utoledo.edu/dl/students/learnersupport.html>

ACADEMIC POLICIES

Academic Honesty: You are urged to refer to the university's policy on Academic Honesty at <http://www.utoledo.edu/dl/students/dishonesty.html>. **Violation of this policy can result in a course grade of F with additional university sanctions possible. You will be required to read and sign Academic Honesty statement before exam 1 or get zero for the exam score(s).**

Examination Policy: Examination dates are given on the schedule and will not be changed. Excused absences will be given only to students who miss an hour exam under the conditions listed below. The final exam cannot be excused – it must be completed to pass the course. For all exams you must show a **photo identification card**.

Students who will not be able to take an exam at the scheduled time due to an irresolvable conflict with a *major responsibility* must provide some **written** documentation to verify the conflict. This situation may occur for student on official university business, including athletes. *Approval must be obtained **at least 7 days before the scheduled test date**.* The exam will be given at another arranged time *before* the scheduled test day.



Students who do not take an exam due to *illness*, car accident or similar **extreme** circumstance should inform their instructor of their difficulties as soon as possible, preferably by email. These difficulties must also be **documented** by a physician's note, an accident report, etc. Students must complete an **Absence Report Form** in all cases of missed examinations. These can be obtained from the secretary in the Chemistry Office, BO2022. **Documentation** supporting your excuse must be attached to the form. **In all other circumstances a missed exam will result in a grade of 0.**

If the absence is deemed excusable, your missed exam score will be computed based on the average of your other midterm exams, or exam make up will be provided with a different version of missed exam.

Absences due to COVID-19 quarantine or isolation requirements **are** considered excused absences. Students should notify their instructors and follow the protocols summarized in this document on [Navigating COVID-Related Course Concerns](#).

You may use a **calculator** during the exams, it has to be *non-graphical* and *non-programmable*. The following calculator models are **prohibited** for use during exams: all TI Pro models (e.g., TI-30X Pro, TI-36X Pro), TI-College Plus, TI-36X II, Casio fx-991ES, Casio fx-115, and other programmable models. Use of graphical and programmable calculators, and cell phones is not allowed during exams.

Extensions, make ups or late assignments

Exam make up can be provided as listed above. A proper documentation is required.

Two (2) ALEKS extensions for missed or late assignments will be provided over semester. If you need more extensions, please provide a doctor note or other documented excuse. You need to request an extension within two weeks after the due date. It is highly recommended that you complete all ALEKS assignments on time.

Quiz extension may be provided if a documented absence is deemed excusable. Contact your instructor *within two weeks period* since the quiz date.

Writing assignment: an extension may be provided if a documented absence is deemed excusable. Contact your instructor *within two weeks period* from the due date. A different version of the writing assignment may be provided.

The comprehensive list of academic policies that pertain to you in this class and throughout your academic journey is listed here: <http://www.utoledo.edu/policies/academic/undergraduate/>.

COURSE EXPECTATIONS

1. Attendance and participation are required for the lecture and recitation classes
2. Read the book before the lecture, the schedule is listed below
3. You need to come to the recitation class prepared by completing homework end-of-chapter problems. Problems will be listed in lecture and posted on Blackboard. Bring the textbook to the recitation class
4. ALEKS online homework assignments have to be completed before the deadline
5. Exams and quizzes need to be taken on scheduled days

If you need extra help, **email your instructor** at any time. You will not be graded or judged based on the questions that you ask! Seek online help in the **Chemistry Help Center**, **LEC center** and/or **Supplemental Instruction (SI)** sessions.



OVERVIEW OF COURSE GRADE ASSIGNMENT

Midterm Grading

Midterm grades are assigned on the 8th week of class and are used to assist students with determining their academic standing. Attendance is also recorded during the 8th week to meet state and federal laws regarding financial aid disbursement. Please note, if you are not attending class it could affect your financial aid (scholarships, grants, loans or Federal Work Study). If you decide you are not going to attend this class (or any other class you have registered for), you must formally withdraw (drop) from the course.

Your midterm grade will be calculated as follows:

Participation points (Recitation + iClicker)	approx. 38 pts
Writing assignment on Blackboard	2 pts
ALEKS homework (objective score completion)	100 pts
Pre-term Quiz on Blackboard	4 pts
Midterm exam, 100 pts	100 pts
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TOTAL	approx. 244 pts

Recitation grading: students who attend recitation and can show the completed homework at the beginning of class will earn 3 recitation points each week: 1 point for attendance and 2 points for completed homework with all work shown.

iClicker grading: for each question answered in lecture class, 0.1 point is assigned for any answer, 0.3 point - for correct answer and 0 points - for no response).

Final Grading

Participation points (Recitation + iClicker)	60 pts	7.5%
ALEKS homework	200 pts	25.0%
Writing assignment	20 pts	2.5%
Quizzes on Blackboard (2)	20 pts	2.5%
Midterm exams, 3 @ 100 pts each	300 pts	37.5%
Comprehensive final exam	200 pts	25.0%
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TOTAL	800 pts	100%

The final score for ALEKS homework will be calculated according to the following:

Total objective completion score (100% = 100pts) + Pie completion score (100% = 100pts) = 200 pts.

Participation in any **SI session** is worth 1 point, which will be added to the **Participation Points**.

It is a very high priority to your instructor to ensure fairness and equity in all grading aspects of the course. Anyone who has the prerequisites for this course and effectively studies the material can achieve a reasonable level of achievement and therefore an acceptable grade, i.e., a C or above. I don't curve grades, so each of you can achieve the grade you are willing to earn!

Midterm exams will cover the material listed in the schedule below; the final exam is comprehensive and includes all of the material studied in class during the semester.



Grade Scale: these are the minimum percentages and total number of points needed to receive the indicated grade

A	88% or 704 pts	A-	85% or 680 pts		
B+	82% or 656 pts	B	79% or 632 pts	B-	76% or 608 pts
C+	73% or 584 pts	C	70% or 560 pts	C-	66% or 528 pts
D+	62% or 496 pts	D	58% or 464 pts	D-	54% or 432 pts
F	<54% or <432 pts				

A grade of C (70% or 560 pts) or above AND taking the final exam are needed to enter CHEM 1230. If your grade in CHEM 1090 is C- or lower, you must repeat CHEM 1090 before continuing to CHEM 1230.

A course grade of **Incomplete** can be given only to those students who have completed all but a very small percentage of course requirements (usually final exam only) for an acceptable documented reason. The **Incomplete** must be removed before you take CHEM 1230.

UNIVERSITY POLICIES

Institutional Classroom Attendance Policy

Please be aware that the university has implemented an attendance policy, which requires faculty to verify student participation in every class a student is registered at the start of each new semester/course. For this course, if you have not attended/participated in class (completed any course activities or assignments) within the first 14 days, I am required by federal law to report you as not attended. Unfortunately, not attending/participating in class impacts your eligibility to receive financial aid, so it is VERY important that you attend class and complete course work in these first two weeks. Please contact me as soon as possible to discuss options and/or possible accommodations if you have any difficulty completing assignments within the first two weeks.

Policy Statement on Non-Discrimination on the Basis of Disability (ADA)

The University is an equal opportunity educational institution. Please read [The University's Policy Statement on Nondiscrimination on the Basis of Disability Americans with Disability Act Compliance](#).

Your safety and well-being is very important; please take a minute to review Title IX, the Student Code of Conduct and other policies that apply to you as a student of the University: <https://www.utoledo.edu/title-ix/policies.html>

Academic Accommodations

The University of Toledo embraces the inclusion of students with disabilities. We are committed to ensuring equal opportunity and seamless access for full participation in all courses. For students who have an accommodations memo from the Office of Accessibility and Disability Resources, we invite you to correspond with us as soon as possible so that we can communicate confidentially about implementing accommodations in this course. For students who have not established accommodations with the Office of Accessibility and Disability Resources and are experiencing disability access barriers or are interested in a referral to health care resources for a potential disability, please connect with the office by calling 419.530.4981 or sending an email to StudentDisability@utoledo.edu.

ACADEMIC AND SUPPORT SERVICES

Please follow this link to view a comprehensive list of [Student Academic and Support Services](#).

Course scheduling assistance: Chemistry Department Secretary Ms. Samples is in the Room BO 2022, telephone 419-530-2698, email: Pamela.Samples@utoledo.edu. If you have further questions or if you need assistance, please talk to her. She takes care of all scheduling changes.



Supplemental Instruction (SI) is a student assistance program offered through First Year Experience support. Advanced students provide several structured study sessions on the material each week. Your participation is optional – though very strongly encouraged. Data indicates this assistance has been very valuable to students. Participation in each SI session is worth 1 participation point, and you can attend as many sessions as you want.

Chemistry Help Center is a great place to receive assistance. It is generally open all day Monday through Friday & evenings Monday through Thursday. No appointment is necessary.

Tutoring support for all UT students is available through the **Learning Enhancement Center (LEC)**

<https://www.utoledo.edu/success/lec/>

Instructor Office Hours Online are times when you can come with questions about the course material. Our office hour times are listed at the top of the syllabus.

SAFETY AND HEALTH SERVICES FOR UT STUDENTS

Please use the following link to view a comprehensive list [Campus Health and Safety Services](#) available to you as a student.

Link to Food Pantry: <http://www.utoledo.edu/studentaffairs/food-pantry/>.

SPECIAL COURSE EXPECTATIONS DURING COVID-19

Maintaining a safe campus during the ongoing COVID-19 pandemic remains a top priority. UToledo continues to follow the guidance of the U.S. Centers for Disease Control and Prevention and Ohio Department of Health to keep our campus safe.

ATTENDANCE

The University of Toledo has a missed class policy. Before coming to campus each day, students should take their temperature and complete a self-assessment for symptoms of COVID-19, such as cough, chills, fatigue or shortness of breath. Anyone with a temperature at or above 100.0 degrees Fahrenheit or who is experiencing symptoms consistent with COVID-19 **should not come to campus** and contact their primary care physician or the University Health Center at 419.530.5549. For more information on the symptoms of COVID-19, please go to

<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>

Please make sure to inform your instructor that you will be missing a class.

COVID-19 testing for sick students is available on both Main Campus and Health Science Campus. Call 419.383.4545 for an appointment. Absences due to COVID-19 quarantine or isolation requirements **are** considered excused absences. Students should notify their instructors and follow the protocols summarized in this document on [Navigating COVID-Related Course Concerns](#).

In the event that you have tested positive for COVID-19 or have been diagnosed as a probable case, please review the [CDC guidance](#) on self-isolation and symptom monitoring, and report the disclosure to the Division of Student Affairs by emailing StudentAffairs@utoledo.edu or by connecting with their on-call representative at 419.343.9946. Disclosure is voluntary and will only be shared on a need to know basis with staff such as in the Office of Student Advocacy and Support, The Office of Residence Life, and/or the Office of Accessibility and Disability Resources to coordinate supportive measures and meet contact tracing requirements.

FACE COVERINGS

Face coverings **are required** while on campus, except while eating, alone in an enclosed space, or outdoors practicing



social distancing. *Students will not be permitted in class without a face covering.* If you have a medical reason preventing you from wearing a face covering due to a health condition deemed high-risk by the CDC, submit an [online application](#) to request an accommodation through the Office of Accessibility and Disability Resources. Students will need to provide documentation that verifies their health condition or disability and supports the need for accommodations. Students already affiliated with the Office of Accessibility and Disability Resources who would like to request additional accommodations due to the impact of COVID-19, should contact their accessibility specialist to discuss their specific needs. You may connect with the office by calling 419.530.4981 or sending an email to StudentDisability@utoledo.edu.

VACCINATION

Doctors and other health care professionals agree that the best way to protect ourselves and each other is to get vaccinated. Case data clearly show that vaccines remain highly effective at preventing serious illness from COVID. Once you receive the COVID vaccination, please register on the COVID Vaccine Registry site at:

<https://utvaccinereg.utoledo.edu/>.

SPECIAL NOTES

It's important to note, that based on the unpredictability of the COVID-19 virus, things can change at any time. So please be patient and understanding as we move through the semester. I am also asking that you keep me informed of concerns you may have about class, completing course work/assignments timely and/or health concerns related to COVID.

COMMUNICATION GUIDELINES

As your instructor, I am here to help, and will do my best to respond to your email quickly. **Please include the course section number in the email subject line.** Students are expected to check their UT email account frequently for important course information. In addition, if you are having difficulty in the course or trouble understanding any aspect of it, please let me know as soon as possible. I would be happy to arrange a time to meet with you in person or virtually if you feel that you have questions that would best be answered in real-time. I want you to be successful in this course, so **let's work together!**

Covid-19 pandemic and recent political and social events have caused fear, stress, and pain in many of us. Under these circumstances, it is completely normal to feel overwhelmed or anxious, and to have difficulty concentrating. I have designed this course with these challenges in mind, and I am committed to continuing to work with all of you to create a positive and supportive learning environment throughout the term. If your health, well-being, or school work are being impacted by recent events, I encourage you to contact me and make use of the resources University of Toledo provides, which I have included in this syllabus.

STUDENT LEARNING OUTCOMES

Upon completion of this course, the student will be able to:

1. Classify matter into types
2. Write the symbols and names for common elements
3. Use dimensional analysis to do unit conversions and solve problems that use exponential notation
4. Use the correct number of digits to indicate the precision of a measurement or a calculated result
5. Solve problems that use density, mass, volume, temperature, energy, wavelength, moles, atomic and molar masses, percent composition, the empirical and molecular formulas, including stoichiometry problems
6. Explain the atomic structure using subatomic particles
7. Write full and abbreviated electron configurations for the elements; identify shell, subshell, and orbitals using quantum numbers

8. Draw energy diagrams for atoms and ions
9. Interpret and write the chemical formulas and names of ionic and covalent compounds
10. Draw electron dot (Lewis) diagrams for atoms and molecules
11. Balance chemical equations and predict the products of the reaction
12. Write net ionic equations for reactions in aqueous solution and to interpret such equations

COURSE SCHEDULE

WEEK	DATES	TOPIC	LEARNING OUTCOME(S) (See below)	ALEKS assignments	ASSIGNMENTS
1	1/17-1/23	Introduction; Math prerequisites; Ch.1: Basic Concepts	1-2	Initial assessment (\hat{A}) & Obj. 1 (Math) due Wed., 1/19; Obj. 2 (Math) due Sun., 1/23	Preterm QUIZ due Sun., 1/23
2	1/24-1/30	Ch.1: Basic Concepts; Ch.2: Measurement	1-5	Obj. 3 (Ch.1) due Wed., 1/26; Obj. 4 (Ch.1) due Sun., 1/30	We start using iClicker for credit in lecture on 1/25
3	1/31-2/6	Ch.2: Measurement; Ch.3: Atoms and Atomic Masses	3-5	Obj. 5 (Ch.2) due Wed., 2/2; Obj. 6 (Ch.2) due Sun., 2/6	
4	2/7-2/13	Ch.3: Atoms and Atomic Masses; Ch.4: Electronic Configuration	5-6	Obj. 7 (Ch.3) due Wed., 2/9; Obj. 8 (Ch.4.1-4.2) due Sun., 2/13; \hat{A}	
5	2/14-2/20	Ch.4: Electronic Configuration	7-8	Open pie due Wed., 2/16; Obj. 9 (Ch.4) due Sun., 2/20	EXAM 1 (Ch.1-3, 4.1) is on Thurs., 2/17
6	2/21-2/27	Ch.4: Electronic Configuration; Ch.5: Chemical Bonding	7-10	Obj. 10 (Ch.4) due Wed., 2/23; Obj. 11 (Ch.5) due Sun., 2/27	
7	2/28-3/6	Ch.5: Chemical Bonding; Ch.6: Nomenclature	9-10	Obj. 12 (Ch.5) due Wed., 3/2	
	3/7-3/13	<i>Spring break – no classes and no assignments!</i>			
8	3/14-3/20	Ch.6: Nomenclature	9	Obj. 13 (Ch.5) due Mon., 3/14 ; Obj. 14 (Ch.6) due Sun., 3/20	EXAM 2 (Ch.1-5, part of 6) is on Thurs., 3/17
9	3/21-3/27	Ch.7: Formula Calculations	5	Obj. 15 (Ch.6) due Wed., 3/23; \hat{A} ; Open pie due Sun., 3/27	Nomenclature QUIZ due Sun., 3/27
10	3/28-4/3	Ch.8: Chemical Reactions	11	Obj. 16 (Ch.7) due Wed., 3/30; Obj. 17 (Ch.7) due Sun., 4/3	
11	4/4-4/10	Ch.8: Chemical Reactions; Ch.9: Net Ionic Equations	11-12	Obj. 18 (Ch.8) due Wed., 4/6; Obj. 19 (Ch.8) due Sun., 4/10	
12	4/11-4/17	Ch.9: Net Ionic Equations; Ch.10: Stoichiometry	5,12	Obj. 20 (Ch.8) due Wed., 4/13; Obj. 21	Required Writing Assignment (Ch.8-9) due Thurs., 4/14 in lecture

WEEK	DATES	TOPIC	LEARNING OUTCOME(S) (See below)	ALEKS assignments	ASSIGNMENTS
				(Ch.8-9) due Sun., 4/17; Å	
13	4/18-4/24	Ch.10: Stoichiometry	12	Open pie due Wed., 4/20; Obj. 22 (Ch.10) due Sun., 4/24	EXAM 3 (Ch.1-10.2) is on Thurs., 4/21
14	4/25-5/1	Ch.10: Stoichiometry; Review	1-12	Obj. 23 (Ch.10) due Wed., 4/27; ALEKS pie due Sun., 5/1	
15	5/2-5/4				FINAL EXAM (Ch. 1-10) is on Tues., 5/3

Å is an ALEKS Knowledge Check

All assignments are **due midnight** unless your instructor told otherwise

Make sure that your travel and employment plans do not conflict with this schedule!

FINAL EXAM SCHEDULE ON TUESDAY, 5/3:

Sec. 001: Lecture time 2:30 – 3:25 PM, **Exam time** 2:45 – 4:45 PM in WO1201

Sec. 013: Lecture time 5:45 – 6:40 PM, **Exam time** 5:00 – 7:00 PM in WO1201

Final exam has to be taken as scheduled with your lecture section.

RECITATION HOMEWORK

Complete on paper and bring with you to Recitation class the following end-of-chapter questions, exercises and problems to earn 3 participation points for each homework. *All work has to be shown* for problems involving Math.

Chapter	End-of-chapter textbook problems
1	1.9, 12, 13, 15, 16, 22, 23, 26, 30, 33, 34, 49, 51, 52, 53, 54, 55, 66, 67
2	2.6, 19, 23, 25, 29, 31, 32, 48, 54, 61, 64, 67, 70, 81, 82, 83, 86, 95, 104, 107
3	3.5, 18, 19, 26, 39, 45, 48, 53, 54, 56, 57, 58, 68, 73, 89, 91
4	4.4, 13, 14, 17, 19, 23, 25, 26, 33, 37, 38, 39, 41, 51, 57, 58, 59, 69, 73, 75
5	5.4, 9, 27, 29, 36, 37, 38, 39, 45, 48, 49, 52, 53, 69, 71, 72, 75, 79, 102
6	6.1, 3, 6, 7, 8, 10, 13, 22, 24, 27, 28, 30, 41, 46, 47, 51, 52, 57, 68, 84
7	7.9, 14, 18, 20, 32, 36, 40, 53, 54, 56, 62, 63, 75, 76, 85, 87, 88, 92, 96, 103(a,b,c), 107
8	8.16, 23, 26, 30, 32, 34, 36, 40, 43, 45, 56, 58, 61, 68, 71, 78, 79, 85
9	9.4, 5, 12, 13, 22, 27, 28, 29, 32, 34, 36
10	10.1, 3, 11, 19, 24, 26, 33, 39, 43, 46, 47, 57, 58, 61, 67, 74, 83, 88, 92, 96, 100, 104, 114

WELCOME! I look forward to engaging and learning with you throughout the semester!