



Chemistry 111, General Chemistry Laboratory A

Summer 2021 Syllabus

Chem 111-001, General Chemistry Lab A (1 credit hour)

Summer Session A (6-weeks): May 25th – July 1st, 2021

Prerequisite: Math Placement Test or Math 117

Lab Location: ONLINE; there are no on-campus meetings.

Course Meeting Times: This course is designed as mostly asynchronous (pre-recorded lectures, independent videos and/or virtual labs, other activities) components that all have due dates. There are a couple synchronous (real-time, virtual in ZOOM) check-ins. It is the student's responsibility to pay attention to all information regarding the course, including the course schedule which is at the end of this syllabus. As a student enrolled in the course, you agree to follow and complete all course aspects including rules, requirements, virtual labs, lab report, assignments, homework, quizzes/exams, abide by due dates, etc. set forth in this syllabus and displayed in Sakai. This course requires your full commitment so make sure you can commit 3-4 hours per week to complete the course work. All times listed are Central Standard Time (CST); all due dates are in CST regardless of the time zone you are learning in!

- **Asynchronous sessions (not meeting in real-time):** Days listed as this means the class does not meet via ZOOM. Listed lab lectures should be reviewed and lab activities should be completed during the scheduled lab time. Due dates of work must be followed.
- **Synchronous sessions in ZOOM:**
The ZOOM link for class is accessed from the ZOOM tool in Sakai. Log in to Sakai to join. Make sure your ZOOM name is full First Name and Last Name. Odd usernames will not be allowed into ZOOM to combat any unauthorized access. Be mindful of this!

Academic Calendar: It is the student's responsibility to not only know the schedule for this course but also the official [University Academic Calendar](#) and important dates on that calendar.

Laboratory Coordinator: Dr. Katrina Binaku

Office Hours in ZOOM: [Monday & Wednesday 12-12:40pm](#), [Tuesday & Thursday 8:30-9am](#), and by a scheduled appointment (schedule it via email). Click the links and join any time during the hours.

Email: kbinaku@luc.edu

Teaching Assistant: Claire Baxter

Office Hours in ZOOM: [Wednesdays 9-10am](#) and by a scheduled appointment (schedule it via email). Click the link and join any time during the hour.

Email: cbaxter3@luc.edu

Email Etiquette: When sending emails please put Chem 111-001 in the subject line or there will be a delay in response time. Dr. Binaku must know which course a student is in before replying to email. Weekday emails will get a response within an hour. Emails after 8:00 pm may not be replied to until the next morning. Dr. Binaku checks email on weekends; response times are longer [12-24hrs].

Welcome to Chem 111. We look forward to having you in the course this summer session. Check Loyola email daily & log-in to Sakai several times a week. Read the entire syllabus to understand the course expectations.

COURSE DESCRIPTION

This lab course emphasizes introductory application of topics/theory covered in the lecture course (Chem 101). It introduces students to basic chemical laboratory skills & techniques including lab and chemical safety, glassware & lab equipment, significant figures, basic statistics, writing a formal lab report, graphing data, accuracy & precision, atomic structure, periodic table trends, solution preparation, stoichiometry, titration, pH, use of indicators, and spectrophotometry. This list is not exhaustive but mentions the highlights.

Goals of this course include: 1) teach lab safety & basic laboratory skills, 2) connect students' lecture topics to virtual lab simulations, and 3) introduce scientific writing via a formal lab report and lab notebooks. By completing this lab course, student outcomes include: 1) demonstrate safe lab practice and use of glassware & lab equipment, 2) demonstrate stoichiometry & titrations as well as use of various lab equipment through analysis of data & calculations and theoretical analysis questions coupled to each lab experiment, and 3) practice scientific writing through completion of a formal lab report.

ROLE OF TEACHING ASSISTANTS

The function of a TA is to help the Lab Coordinator facilitate online learning content and provide individual help to students when necessary. Claire is our teaching assistant for the course and is very experienced in working for me for general chemistry labs. TA responsibilities include but are not limited to holding one weekly office hour, presence in any synchronous sessions, grading notebooks & the formal lab report, and answering student questions via email. Lab Coordinator and TA are in constant communication and "CC" each other on email replies to students. This mitigates a student emailing both the Lab Coordinator and TA with the same questions; one reply is given and is the same answer whether from Dr. Binaku or the TA.

TA will not do the course work for you. TAs help students develop critical thinking and problem-solving skills. Lab Coordinator is available during and outside of class time if there are any questions/concerns that the TA cannot handle. Students can always email the Lab Coordinator; TA is present to help answer student questions too and can be emailed any time as well. Lab Coordinator has final authority in all matters relating to the course. Utilize both the Lab Coordinator and TA for help. *If at any point you want to talk to the Lab Coordinator regarding the TA, please do. The TA should enhance the educational experience. If this is not the case, talk to Dr. Binaku

REQUIRED ITEMS

- 1) Desktop or Laptop computer. Virtual Lab simulations do NOT work on tablets nor mobile devices. Computer must have a microphone and speakers to participate in synchronous sessions and for office hours. If you do not have a desktop or laptop computer, you need to contact the Information Commons [extended loan equipment program](#) within the first week of summer class and arrange this resource. Lab Coordinator is not responsible for coordinating this resource for students nor responsible for the loaned device. Everything in this course requires a computer for access.
- 2) High-speed Internet access: Wired (ethernet cable) preferred but WI-FI is ok. Make sure WI-FI connection is reliable. Lab Coordinator is not responsible if internet goes out when you are working on course items. Contact the Information Commons [extended loan equipment program](#) within the first week of summer class and arrange this resource if you do not have internet at home. Lab Coordinator is not responsible for coordinating this resource nor responsible for the loaned device.
- 3) Scientific OR graphing calculator. Suggested model: CALC TI30XA SCIENTIF/STAT FRAC. A graphing calculator is o.k. too. Cell phones are not calculators; do not use them for calculations.
- 4) [Sakai access](#) via the internet to review/complete course content, resources, review grades, etc.

- 5) Labster – web-based virtual lab experiment simulations. Access to the Labster virtual lab simulations will be provided in Sakai. Labster is the foundation of the course. Lab experiment exercises are completed in a virtual lab space. Labster will only run on a desktop or laptop computer.
- 6) [ZOOM video & web conferencing software](#) (free for LUC students). UVID username and password may be required to access and download ZOOM, enter synchronous course meetings, office hours, etc. See [ZOOM participation instructions](#) supplied by the University for more info. Links to ZOOM for synchronous sessions and office hours will be provided in Sakai.
- 7) Panopto (free for LUC students). One format of recorded course content is Panopto videos. You may be prompted to log in with UVID username and password to view the videos. Links to videos will be provided in Sakai in the Panopto tool and via email links.
- 8) Microsoft 365 (free for LUC students) to write a formal lab report. Information is supplied on [how to download & access Microsoft 365 for free](#).
- 9) Composition style notebook (not spiral bound & no tear-out perforations). Line ruled.
- 10) CamScanner app (works on iPhone or Android) or a scanner machine. You only need one. Cam Scanner is a free app that converts phone pictures to a PDF file. It is required to take pictures of your Composition notebook pages and upload them as a PDF file to Sakai for grading. You can also use a scanner machine for scanning notebook pages and save the scans as a PDF file.
- 11) A non-erasable pen is useful for writing notes in the Composition Notebook.
- 12) Periodic table. There is a cool one provided for free by the [Museum of Science & Industry](#).

INSTRUCTIONAL FORMAT

- Most of the sessions are asynchronous to allow for flexibility in student schedules. Items will be posted in advance so students can choose to get ahead too. Attendance in the few synchronous sessions in ZOOM that we have is highly encouraged as a way to connect with classmates, ask Dr. Binaku questions, and check-in. The lecturing portion of synchronous sessions are recorded if you do miss a session. That way, students do not miss out on information. Other than office hours or ZOOM appointments, the synchronous sessions are the only other “real-time” opportunity to ask questions and communicate. Emails work great, but they are not “real-time.” There is a delay with an email reply.
- The asynchronous sessions are designed as time set aside for you to learn content in Panopto lectures AND work on lab simulations or other homework instead of meeting in ZOOM. You have access to the lab simulations 24/7; use time wisely. Much of the course work is asynchronous and has specific due dates that will not be adjusted.
- We are going to have fun with Labster simulations! Labster gives students direct exposure to laboratory protocols and the ability to experience a variety of experiments in a virtual space. Labsters can be completed an unlimited number of attempts to earn the ‘best’ grade; but there are post-lab assignments that are due at specific dates. All course work is one attempt only, except for the Labsters which are unlimited attempts.
- There may be polls, questions in the chat, or other means of interaction during the ZOOM sessions. If enough student responses aren’t gathered, Lab Coordinator will wait for student participation before proceeding forward with the lab discussions of the day.

GENERAL POLICIES

- Course work will be graded with an emphasis on correct significant digits, consist results (do data & observations match conclusions), completion of the Labsters, correctness of calculations & analysis, and thoroughness in responses. Following directions of reporting calculated answers are taken into account.
- The Composition notebook must contain all laboratory experiment information [Date, Title, data/observations/calculations for the experiment]. It will be useful to record progress during the Labster experiment simulations to keep track of calculations, data, etc. Use the notebook as a resource. Feel free

to take class notes in it as well; it is a place to organize your thoughts which is important in an online course. A lot of the success in an online course is the student being organized. The lab coordinator will see the actual lab notebook in pictures when it is uploaded as a PDF using the apps mentioned.

- Aspects of course work must be completed in the avenue/medium that they are provided in and in the time allotted [i.e. be mindful of due dates]. This means that a lab simulation can only be completed in Labster, for example, or Test and Quizzes in Sakai can only be submitted in Sakai. Course work items such as homework, quizzes/tests/exams, lab simulation results, lab report, etc. can never be submitted via email. No exceptions. Submit them in their required, respective medium and do so on time.
- Be mindful that everything in the course has a due date. Course work cannot be made up. There are no exceptions to this rule. Late work is generally not accepted. Although majority of the course requirements are asynchronous work; there are due dates and they must be followed.
- There is a point value associated with the work, and one cannot earn points for work not completed. **There are no makeups allowed i.e. students cannot make up Sakai work that they missed the due date for.** There are eight lab experiments and students are expected to complete all of the assigned lab experiments and work in this course; if a lab simulation is not completed by the specific deadline at the end of the course, a zero (0) is earned. Same policy for all other course work. No makeup work is given.
- Students should not enroll in courses that they cannot fully attend or commit 4-5 hours per week to. Missing 2 or more of the lab simulations is significant and unacceptable and will result in academic failure. The same penalty applies if the formal lab report is not turned in.
- Although probably not applicable, since all University activities are suspended: Students participating in co-curricular activities must make information concerning time conflicts with University sponsored events available to the Laboratory Coordinator within the first week of summer class. The Laboratory Coordinator reserves the right to contact the Athletics Department. Students missing classes while representing Loyola University Chicago in an official capacity (e.g. intercollegiate athletics, debate team, model government organization) will need to discuss their needs with the Laboratory Coordinator. No extensions nor modifications will be made; this is an online [optional] summer course and student who enroll need to recognize it takes commitment.
- Students missing a ZOOM class due to observing religious holidays must alert the Lab Coordinator no later than the first week of summer class. Since all classes are recorded there will be no modifications as students will have access to materials and know all due dates ahead of the religious observation. The Lab Coordinator reserves the right to contact Campus Ministry, which keeps information on a plethora of religions and holidays. Since lab is online and access to all course content is twenty-four hours for several days; there should be no conflicts.

RECORDING POLICY AND COURSE CONTENT POLICY

- ZOOM and recording software will be used to record live synchronous sessions. Lab Coordinator intends to only record the lecture portion(s), but as a student in this class, it is possible your participation in live class discussions may be recorded and that is an artifact of being in this course. The synchronous recordings will be made available only to students enrolled in the course, via Panopto, to assist those who cannot attend the live session or to serve as a resource for those who would like to review content that was presented. All recordings will become unavailable to students in the class when the Sakai course is unpublished (i.e. shortly after the course ends, per the [Sakai administrative schedule](#)). Students who prefer to participate via audio only will be allowed to disable their video camera so only audio will be captured. Lab Coordinator will announce when recording starts so that students can turn their cameras off. Otherwise, students should have their camera on during the synchronous sessions as it allows for a more interactive experience and a way to get to know your classmates and Lab Coordinator.
- The use of all video recordings will be in keeping with the University Privacy Statement shown below:

Assuring privacy among faculty and students engaged in online and face-to-face instructional activities helps promote open and robust conversations and mitigates concerns that comments made within the context of the class will be shared beyond the classroom. As such, recordings of instructional activities occurring in online or face-to-face classes may be used solely for internal class purposes by the faculty member and students registered for the course, and only during the period in which the course is offered. Recordings are not shared outside of this course. The above bullet point states when recordings will occur in this course (synchronous sessions). Recordings including student activity that have been initiated by the Lab Coordinator may be retained by the instructor only for individual use.

- ZOOM chats are not private. Be mindful of what you type in the chat box when messaging other students, the TA, and the Lab Coordinator. Breakout rooms are sometimes utilized too & are monitored.
- All activities pertaining to the course should be completed as an INDIVIDUAL. Any collaboration on course material and/or graded materials can constitute cheating. Failure of the course may result if an instance of copying or sharing answers to graded content is discovered by TA or Lab Coordinator.
- **Course content is designed for use ONLY by students in this course. All materials are subject to privacy and copyright laws. Students are NOT allowed to share any course resources, Labster info, Panoptos, PowerPoints, quiz/test/exam questions, documents, etc. with anyone nor post to any outside media. The Chem 111 syllabus and all course materials are NOT allowed for distribution outside of class nor outside of the University. Uploading, posting, copying, or sharing electronic/non-electronic Chem 111 materials outside of class [i.e. share sites] is NOT allowed. If discovered that a student completes such action, the Dean and University get notified immediately.**
- **Chegg, Course Hero, Reddit, among other webpages, are monitored by the Lab Coordinator. If any Chem 111 course content is posted on these sites or other, the Dean and University will be notified. Student(s) involved may fail the content the posted material pertains too and/or fail the course, not to mention you are breaking the law by posting my material to ANY outside sites. Posting any course content online to facilitate getting answers is a form of cheating and will not be tolerated.**

ACADEMIC INTEGRITY

The standard of academic integrity and personal honesty delineated in the [College of Arts & Sciences Statement on Academic Integrity](#) is expected of every student and will be enforced. Cheating can take many forms in a lab course, but the most common forms are copying data and answers to analysis questions, sharing files for homework, completing Sakai work or other electronic content with another person. The data and analysis as well as the homework submitted for grading must be your own. If it is not, no credit will be awarded for the lab simulation, nor will make-ups be granted. Findings of dishonest academic behavior are reported to the Chair of the Chemistry Department and to the Dean's Office; it is also entered into an individual's record. Copied answers to course work or copied formal lab reports will result in penalty for all students involved. Turn It In is utilized for formal lab reports to identify plagiarism, cheating, and other.

COURSE REPEAT RULE

Effective as of the Fall 2017 semester, students are allowed only THREE attempts to pass Chemistry courses with a C- or better grade. The three attempts include withdrawals (W). After the second attempt, student must secure approval for a third attempt. Students must come to the Chemistry Department, fill out a permission to [register form](#) or access it from the Department of Chemistry & Biochemistry website, and personally meet and obtain a signature from either the Undergraduate Program Director, Assistant Chairperson, or Chairperson in Chemistry. A copy of this form is then taken to your Academic Advisor in Sullivan to secure final permission for the attempt.

TUTORING

To find more information visit the [Tutoring Center webpage](#). YES, there is tutoring via ZOOM.

GRADING

Reference the grading scale. There will be no change in the grading scale nor the number of points allotted in this course. There are no dropped grades in the course. Every piece of course work is counted toward the course grade. It is in your benefit to complete all lab experiment simulations to know the content for homework, quiz/test/exam, and/or a formal lab report. There weighting of the grades in the course are noted on the next page. A zero (0) is earned for work not completed. Remember that there is no makeup work; no exceptions. The University uses the +/- grading scale system and that system is implemented in this course. Rounding only applies to the final course grade percentage. Sakai reports course grades to TWO digits past the decimal (XX.XX%); this final course grade percentage is rounded to the closest integer. For example, an 89.50% or 89.90% (B+) rounds up to a 90% (A-), BUT an 89.30% or 89.45% (B+) round to the integer 89% (B+).

Grades of completed online items are posted on Sakai within one week of completion. Grading of the formal lab report may take up to two weeks. Any grading discrepancies must be resolved no later than three business days after the grade & feedback are released in Sakai. A student must show proof the work was graded wrong or grade entered incorrectly. Grade disputes will not be acknowledged after the last day of class.

Labster simulations allows multiple attempts; the BEST attempt grade is recorded. Multiple attempts on a Labster is OK and encouraged, however, there are post-lab quizzes, notebook entries, and other items that must be completed by a specific due date regardless of how many times the Labster itself is done. Notebook entries are tied to the Labster simulation content, data, etc. A student *cannot* submit a notebook entry for grading if there is no evidence at all that the student completed the Labster simulation(s) the notebook entry is related to.

Grading Scale:

% total	Grade
94 – 100	A
90 – 93	A-
87 – 89	B+
84 – 86	B
80 – 83	B-
77 – 79	C+
74 – 76	C
70 – 73	C-
65 – 69	D+
60 – 64	D
0 – 59	F

Grade if an Assignment/Course Work is Missed: As stated earlier in the syllabus, makeup work is not given. A zero (0) is recorded for work not completed. Students are responsible for understanding missed material, and normal deadlines apply for completing related items. This is an online course which affords flexibility in completion of items [access 24/7 to lab simulations during their open periods before the due date, as opposed to an in-person laboratory having 3 hours to complete a lab]. Sometimes life happens and the Lab Coordinator understands that; contact the Lab Coordinator if any legitimate emergencies arise. Lab Coordinator has the right to fail a student if two or more lab simulations are not completed or if the formal lab report is not turned in.

Late Work Policies:

QUIZZES: If not completed on time, a 0 is the final grade. Quizzes cannot be accessed after the due date.

NOTEBOOK ENTRIES: If not completed on time, a 48-hour grade period is allotted to turn the work in late [2pt penalty for lateness applied to grade]. After 48-hours, if the notebook is not turned in a 0 is the final grade.

EXCEL WORK: If not completed on time, a 48-hour grade period is allotted to turn the work in late [2pt penalty for lateness applied to grade]. After 48-hours, if the Excel work is not turned in a 0 is the final grade.

LAB REPORT: If not completed on time, a 48-hour grade period is allotted to turn the work in late [5pt penalty for lateness applied to grade]. After 48-hours, if the lab report is not turned in a 0 is the final grade.

LABSTERS: All simulations are accessible almost the entire 6-weeks of the course 24/7; access to simulations will open on May 25th and close at 11:59pm on Wednesday, June 30th. Any simulations not completed by June 30th earn a 0 as the final grade.

Be advised summer classes are accelerated and the schedule, due dates, and amount of grace offered to late work takes that in to account. As a student in this course, you agree to follow and abide by all due dates and understand grades will suffer if work is not turned in on time AND that the late grace period is comparable. Any course work due in week 6 [the last week of classes] cannot be accepted late since final course grades must be calculated and entered prior to summer session II starting (for example, because Chem 111 is a pre-req to being allowed to take Chem 112).

There is no final exam in this course.

The point breakdown of every item in the course is below on the next page. Students can use this as a guide when navigating through the 6-week course and the requirements. Due dates & times for these items are at the end of the syllabus in the course schedule.

Point Breakdown:

Activity	Origin	Points	% of Final Grade
Laboratory Safety virtual lab simulation	Labster	110	50%
Chemistry Safety virtual lab simulation	Labster	130	
Atomic Structure: Assess Possibility of Life on Other planets virtual lab simulation	Labster	120	
Periodic Table (Principles): Get the Table Organized in Time virtual lab simulation	Labster	160	
Solution Preparation: From Salt to Solution virtual lab simulation	Labster	60	
Pipetting: Master the Technique virtual lab simulation	Labster	140	
Stoichiometry Calculations: ID an Unknown Compound virtual lab simulation	Labster	90	
Titration: Neutralize Acid Lake Contamination virtual lab simulation	Labster	120	
Spectrophotometers: Building and Exploring the Instrument virtual lab simulation	Labster	30	
Eutrophication virtual lab simulation	Labster	170	
Total Labster Points	Labster	1,130	
Quiz on Syllabus and Course Policies	Sakai (Tests & Quizzes)	20	20%
Quiz on Safety Rules in the Laboratory and Notebook Importance	Sakai (Tests & Quizzes)	20	
Quiz on Significant Figures, Accuracy/Precision, and Lab Equipment	Sakai (Tests & Quizzes)	20	
Quiz on Solutions and Concentrations	Sakai (Tests & Quizzes)	20	
Quiz on JoVE videos, Beer's Law, and Spectrophotometry	Sakai (Tests & Quizzes)	20	
Total Quiz Points	Sakai (Tests & Quizzes)	100	
Notebook Entry for Solution Preparation virtual lab simulation	Sakai (Assignments)	20	10%
Notebook Entry for Stoichiometry Calculations virtual lab simulation	Sakai (Assignments)	20	
Notebook Entry for Titration: Neutralize Acid Lake virtual lab simulation	Sakai (Assignments)	20	
Notebook Entry for Spectrophotometer: Building and Exploring the Instrument virtual lab simulation	Sakai (Assignments)	20	
Total Notebook Entry Points	Sakai (Assignments)	80	
Basic Statistics in Excel	Sakai (Assignments)	20	5%
Practice Data Graphing in Excel	Sakai (Assignments)	20	
Total Excel Points	Sakai (Assignments)	40	
Formal Laboratory Report 1, typed: KHP and NaOH Titration [PDF or Word Doc]	Sakai (Assignments)	100	15%
Total Formal Laboratory Report Points	Sakai (Assignments)	100	

*There is a chance to earn 5pts Extra Credit by posting in the "Introduction Forum" in Sakai Forums as a way to get to know you and classmates. That forum is open the first week of class to post in. After that it closes. This is the only extra credit opportunity offered in the course.

EDUCATIONAL GOAL

In this general chemistry laboratory course, my purpose as your Chemistry Lab Coordinator is to provide introduction to experimental methods of scientific investigation in Chemistry. The fundamental models of chemistry discussed in lecture provide the basis for understanding the experimental simulation laboratory work. Each simulation is an opportunity for students to gain competence in the basic techniques of lab work and the experience necessary to understand its significance. It is my wish that this course will encourage students who are seeking intellectual challenges along with an understanding of the chemical principles in the laboratory.

Conducting experiments and collecting data to test the validity of theories and models requires a different set of skills than those required for success in a general chemistry lecture course. During a lab simulation activity, each student's virtual hands, mind, eyes, as well as other senses are focused on the task at hand. Success in the lab involves skills in making perceptive qualitative observations and accurate quantitative measurements. All labs are structured enough so that students should not feel lost or confused, but not so structured that students will find it unnecessary to think for oneself.

REGARDING SAKAI AND TECHNICAL DIFFICULTIES

It is *strongly encouraged* that all required submissions to Sakai, use of Labster and electronic resources, writing formal lab report, opening course files, etc. be done on a reliable wired (ethernet) internet connection. WI-FI is perfectly o.k. if the connection is reliable. The internet user must determine the reliability of their WI-FI. Excuses of "technical difficulties" are generally not accepted as this syllabus is stating all students should use wired (ethernet) internet connection and/or ensure their WI-FI connection is reliable [not prone to outages]. The Lab Coordinator realizes that campus has minimal operation/open buildings and University computer labs may not be accessible. Even so, students should ensure their internet connection is reliable enough to complete an online course without interruption. If an outage arises, the Lab Coordinator does reserve the right to ask for proof. The best advice the Lab Coordinator can give is to NOT complete assignments at the last minute, in order to avoid glitches with internet, since every part of the course work needs reliable internet to submit. Lab Coordinator is not responsible for technical difficulties of personal devices [phone, tablet, home/work/public wireless internet or computer]. Do not submit items in Sakai using a cell phone or a tablet device. Just to be clear, Sakai logs the time and date a student accesses resources, quizzes, etc. Labster does the same so Laboratory Coordinator does have the capability to check on student progress at any point.

DISABILITY ACCOMMODATIONS

If you have a documented disability and wish to discuss academic accommodations, discuss this with the Lab Coordinator via ZOOM as soon as possible, ideally the first week of class. The Coordinator of Student Accessibility Center (SAC), formerly referred to as SSWD, is located in the Sullivan Center and must be contacted independently. Summer is an accelerated program so be mindful of that. Certain deadline cannot be extended, for example. Read up on [SAC Policies and Procedures](#).

Necessary accommodations will be made for students with disabilities who procure a SAC letter. However, to receive any accommodations self-disclosure, proper documentation, and registration with the SAC office at Loyola University Chicago is required. Accommodations cannot be made until the Laboratory Coordinator receives proper documentation. Furthermore, accommodations are not retro-active and begin only once appropriate documentation has been received by the Laboratory Coordinator in a timely manner. Only those accommodations that are specifically listed in the formal SAC letter will be provided. If an accommodation letter suggests the Testing Center be utilized to take an exam, remember the University is not open.

SMART EVALS

Feedback on the course is important so that a Lab Coordinator can gain insight into how to improve the course, the teaching style, and so the department can learn how best to shape the curriculum for future semesters. Students are welcome to email the Lab Coordinator at any point to voice feedback. Towards the end of the summer session, students will receive an email from the Office of Institutional Effectiveness with a reminder to provide feedback on the Chem 111 course. This office will send constant reminders during the open period of feedback until the evaluation has been completed. The evaluation is completely anonymous. When the results are released, no one will be able to tell which student provided individual feedback. Feedback is not released until after summer I session is over, therefore any feedback given will not impact student grades.

ADDITIONAL STUDENT RESOURCES

Below are links of information guides in the event that students need more structured guidance on using the tools in the course. A link to the University Help Desk is also provided for technology questions. Students can email the Lab Coordinator, but the links below may reveal the answer more quickly when a student reads them.

[First and Second Year Advising](#)

[Information Technology Service Desk](#) (ITS Help Desk)

[Labster Simulation Support and Tips](#)

[Panopto Information](#)

[Resource Guide for Online Learning](#)

[SAKAI student guide](#)

[Success Coaching](#) and [Writing Center](#)

[Student Accessibility Center](#)

[ZOOM Information](#) and [Contacting ZOOM Support](#)

SYLLABUS DISCLAIMER

The Laboratory Coordinator reserves the right to revise this syllabus to correct any unintentional mistakes found at any point of the summer session. Students will be notified if any changes have been made. See the next two pages for lab's scheduled activities. The "Lecture and/or Lab Activity" column lists the day the work starts/is open OR is discussed in ZOOM. The "Activity Due Date" column lists the due date of a Forum, Labster, Tests & Quiz, Assignment, formal lab report, etc. Be mindful of due dates; they will also be listed in Sakai. Due dates are not flexible. Due dates are in Central Standard Time (CST) *regardless* of what time zone you reside in.

You are definitely allowed to work ahead of the schedule if you would like as all lectures [PowerPoint and Panoptos] will be posted in advance.

SEE NEXT PAGE FOR TENTATIVE SCHEDULE OF LECTURES AND HOMEWORK/ACTIVITIES.

Tentative Chem 111 Summer 2021 Schedule of Lectures and Activities

WEEK & Class Dates	Meeting Type	Lecture and/or <i>Lab Activity/Homework</i> * (<i>type of work in italics</i>) *activity opens on the class day it is listed	Activity /Homework Due Dates
WEEK 1			
Tuesday, May 25	Asynchronous	<p>Lecture Content in Panopto: Intro & Syllabus Lecture Glassware & Safety Lecture Sakai and Labster Demo</p> <p>Homework (all items listed below): Laboratory Safety (<i>LABSTER</i>) Chemical Safety (<i>LABSTER</i>)</p> <p>Sakai Welcome & Introduction Forum (<i>Forums</i>)</p> <p>Sakai Quiz on Syllabus and Course Policies (<i>Tests & Quizzes</i>)</p>	All Homework listed on Tues. is DUE on Thursday, May 27th by 8:30am
Thursday, May 27	Asynchronous	<p>Lecture Content in Panopto: Importance of a Lab Notebook Lecture</p> <p>Homework (all items listed below): Atomic Structure (<i>LABSTER</i>) Periodic Table Principles (<i>LABSTER</i>)</p> <p>Sakai Quiz on Safety Rules in Lab and Notebook Importance (<i>Tests & Quizzes</i>)</p>	All Homework listed on Thurs. is DUE on Tuesday, June 1 st by 8:30am
WEEK 2			
Tuesday, June 1	Synchronous in ZOOM	<p>Lecture Content in ZOOM: Significant Figures (Sig Figs), Lab Equip. Lecture Accuracy & Precision; Basic Stats in Excel Lecture</p> <p>Homework (all items listed below): <i>Lab Techniques video</i> (JoVE)</p> <p>Sakai Quiz on Sig Figs, Accuracy/Precision, and Lab Equipment (<i>Tests & Quizzes</i>)</p>	Homework listed on Tues. is DUE on Thursday, June 3rd by 10am

WEEK & Class Dates	Meeting Type	Lecture and/or Lab Activity/Homework* (type of work in italics) *activity opens on the class day it is listed	Activity /Homework Due Dates
Thursday, June 3	Asynchronous	<p>Lecture Content in Panopto: Solutions, Solution Prep, and Concentrations Lecture</p> <p>Homework (all items listed below): <i>Solutions & Concentrations video (JoVE)</i> <i>Making Solutions in Lab video (JoVE)</i></p> <p>Solution Prep: From Salt to Solution (<i>LABSTER</i>) Pipetting: Master the Technique (<i>LABSTER</i>)</p> <p>Sakai Notebook Entry for Solution Prep Labster only (Assignments)</p> <p>Basic Statistics in Excel (<i>Assignments</i>)</p>	Homework listed on Thurs. is DUE on Tuesday, June 8 th by 8:30am
WEEK 3			
Tuesday, June 8	Synchronous in ZOOM	<p>Lecture Content in ZOOM: Stoichiometry Lecture Titration Lecture</p> <p>Homework (all items listed below): <i>Stoichiometry, Product Yield, and Limiting Reagents video (JoVE)</i></p> <p>Stoichiometry Calculations (<i>LABSTER</i>)</p> <p>Sakai Notebook Entry for Labster (Assignments)</p> <p>Sakai Quiz on Solutions & Concentration (Tests & Quizzes)</p>	Homework listed on Tues. is DUE on Thursday, June 10 th by 10am
Thursday, June 10	Asynchronous	<p>Lecture Content: No new content; review Tuesday's Panopto for titration review.</p> <p>Homework (all items listed below): <i>Introduction to Titration (JoVE)</i></p> <p>Titration: Neutralize Acid Lake Contam. (<i>LABSTER</i>)</p> <p>Sakai Notebook Entry for Labster (Assignments)</p>	Homework listed on Thurs. is DUE on Tuesday, June 15 th at 8:30am

WEEK & Class Dates	Meeting Type	Lecture and/or Lab Activity* (type) *activity opens on the class day it is listed	Activity Due Date
WEEK 4			
Tuesday, June 15	Synchronous in ZOOM	<p style="text-align: center;">Lecture Content in ZOOM:</p> Scientific Writing: Lab Report Lecture Midterm Lab Experiment for Lab Report: KHP and NaOH Titration Lecture <p style="text-align: center;">Homework (all items listed below):</p> Watch KHP and NaOH Titration videos <i>in Sakai (Formal Lab Report tab)</i> to collect all necessary data to complete the lab report. Type Formal Lab Report on the KHP and NaOH Titration Experiment; Submit finished, typed report to Sakai (<i>Assignments</i>)	Homework listed on Tues. is DUE on Tuesday, June 22 nd by 8:30am
Thursday, June 17	Asynchronous	Lab time is set aside for students to work on lab report data analysis calculations and typing up the report. Optional: Dr. Binaku will be in ZOOM classroom during lab time (8:30-10am) to answer students' questions if you log on and join. 😊	Submit report to Sakai Assignments by 8:30am on Tues., June 22
WEEK 5			
Tuesday, June 22	Asynchronous	<p style="text-align: center;">Lecture Content in Panopto:</p> Light, Beer's Law Lecture Graphing Beer's Law Relationships Lecture <p style="text-align: center;">Homework (all items listed below):</p> <i>Beer's Law video (JoVE)</i> <i>Practice data graphing in Excel (Assignments)</i>	Homework listed on Tues. is DUE on Thursday, June 24 th by 8:30am
Thursday, June 24	Asynchronous	<p style="text-align: center;">Lecture Content in Panopto:</p> Spectrophotometry Basics Lecture <p style="text-align: center;">Homework (all items listed below):</p> <i>Introduction to Spectrophotometry video (JoVE)</i> Spectrophotometers: Building and Exploring the Instrument (<i>LABSTER</i>) <i>Sakai Notebook Entry for Labster (Assignments)</i> <i>Quiz on JoVE videos, Beer's Law, and Spectrophotometry (Tests & Quizzes)</i>	Homework listed on Thurs. is DUE on Tuesday, June 29 th by 8:30am

WEEK & Class Dates	Meeting Type	Lecture and/or Lab Activity* (type) *activity opens on the class day it is listed	Activity Due Date
WEEK 6			
Tuesday, June 29	Asynchronous	<p style="text-align: center;">Lecture Content in Panopto:</p> <p>None. See last week's JoVE videos or Panopto for review.</p> <p style="text-align: center;">Homework (all items listed below):</p> <p>Eutrophication (<i>LABSTER</i>)</p> <p><i>**Reminder: Any LABSTERS you want to repeat or attempt including Eutrophication must be finished by 11:59pm Wednesday, June 30th. The simulation links are inaccessible after that.</i></p>	<p>ALL Labsters, including Eutrophication close on Wednesday, June 30th at 11:59pm</p>
Thursday, July 1	Synchronous in ZOOM, especially if any grading questions	<p style="text-align: center;"><u>LAST DAY OF CLASS</u></p> <p>Wrap up Chemistry lab concepts Undergrad Research/REU/Internship Information</p> <p>Sakai TA Evaluation (Tests & Quizzes)</p> <p>All grading questions must be resolved in ZOOM Breakout Rooms during scheduled class time. Grades are final and put in LOCUS today after class time since Chem 111 is a pre-req to be able to take Chem 112 in summer session II.</p>	<p>You are done with class! BRAVO 😊</p>

****All Labster attempts for all virtual experiments must be completed no later than 11:59pm on Wednesday, June 30, 2021. Final grades are then calculated so students know their course grade by the last day of class [July 1st]. Students have unlimited attempts for the Labster simulations for a higher score starting in week 1 and up until the date and time mentioned [June 30th].**