

CHEM 211L COURSE SYLLABUS
University of Missouri – Kansas City
School of Biological and Chemical Sciences

Course Number and Title: CHEM 211L Experimental General Chemistry I

Catalog Number: 11811

Semester and Year: Summer 2019

Number of Credits: 3

Class Meetings: Blended (Asynchronous) – MW – 8:00 am through 11:00 am

Classroom Location: Blended (Asynchronous) – SCB 203

Instructor: **Sai Siva Kumar Pinnepalli**

Department of Chemistry
203 Flarsheim Hall
5110, Rockhill Rd
Kansas City, 64110

Office Hours: 2:00 – 4:00 pm on Tuesday and Thursday. Available for face to face meetings or interactions by appointment via email or phone. Appointment should be scheduled a day in-advance. After-class times are also available for questions as well! Weekend review sessions may also be possible, with sufficient interest expressed.

Office Phone: 816-517-6530

UMKC E-Mail: spthb@mail.umkc.edu (preferred method of contact)

University of Missouri – Kansas City Mission

UMKC's mission is to lead in life and health sciences; to deepen and expand strength in the visual and performing arts; to develop a professional workforce and collaborate in urban issues and education; and to create a vibrant learning and campus life experience.

Chemistry BS Program Mission

The Department of Chemistry offers the B.S. degree for a major in chemistry that is accredited by the American Chemical Society. The B.S. in Chemistry is designed to offer comprehensive preparation in all areas of chemistry through hands-on laboratory training and rigorous coursework. This degree provides a foundation for those interested in pursuing careers in the pharmaceutical, government, and academic sectors. It focuses on student transformation and lay a path towards advanced degrees, such as M.S. or Ph.D. in various areas of chemistry and molecular sciences.

Catalog Information

Course Description / Attributes: Experimental general chemistry is an introductory lab course which complements CHEM 211 theoretical class on various concepts of chemistry. It focuses on the experiential

learning aspect of the students' career at college. The qualitative and quantitative aspects of experimental chemistry will be discussed.

Pre-requisites / Co-Requisites: CHEM 115L Course or High School Chemistry

Restrictions / Exclusions: None.

Course Format / Instructional Mode: Blended Asynchronous via Canvas learning management system (LMS) from June 3 through July 31, 2019. Asynchronous online video lectures will be posted on Canvas on weekly basis. Face to face physical lab session must be attended on Monday and Wednesday from 8 am through 11 am.

Course Information

Student Learning Outcomes

By the end of this students will be able to:

- **understand** the terms and concepts of chemistry discussed in the lecture
- **perform** the experiments and record the data
- **analyze** the data and report the results
- **learn** to maintain a scientific record

The student's will be assessed by means of in-class quizzes, data acquisitions and post-lab reports which includes both subjective and analytical type problem-solving questions.

Required & Recommended Materials

- *Principles of general chemistry* lab book designed and suggested by the department of chemistry to ensure uniform learning across the learners.
- "*Principles of General Chemistry*" 1st , 2nd or 3rd Edition, by Silberberg; McGraw-Hill; ISBN: 9780073402697
- "*Chemistry: The Molecular Nature of Matter and Change,*" 4th , 5th or 6th Edition, by Silberberg; McGraw-Hill, ISBN: 9780073101699
- Lecture/Instructor Notes

In addition, the learners will be prompted to read some peer-reviewed journal articles to expand their knowledge. The access to journals will be provided via Canvas web portal.

Course Technology Requirements

Although this course is not so demanding regarding the computer resources, the students are expected to avail basic resources through university or personal means. The university library provides the latest updated softwares whose services can be utilized. At a basic level, you need to have access to:

- Internet Explorer, Google Chrome or Mozilla Firefox for Windows/ Safari for Apple operating systems
- Updated versions of Java, Media Player and Adobe Reader or similar features for Apple and
- High-speed broadband internet connection

Technology Support

The UMKC's Instructional Technology Services (ITS) can be utilized by calling 816-235-6700 or emailing its@umkc.edu, should you have questions with regards to technical glitches. The tech support is available during the business hours (7:00 am to 6:00 pm) from Monday through Friday. Live online chat is available through the Canvas login page on Sunday and Monday nights from 6:00 pm to 10:00 pm and on Tuesday's from 8:00 pm to 10:00 pm.

Evaluation and Grading Criteria

Experimental general chemistry lab is graded on a credit basis. Every lab is comprised of three parts: the in-class quiz on video lecture and safety precautions is worth 20%, attendance and data acquisition from the experiments constitute 50% and the post-lab report constitute 30% of the lab making a total of 100 points. There is a total of 10 labs in this course, of which 9 best performed labs will be considered towards your final grade. The end of the semester final exam will be given which is worth 100 points. Please review the following table for more clarification:

In-class quiz (20%)	20 pts
Attendance & Data Acquisition (50%)	50 pts
Post-lab Report (30%)	30 pts
Total Possible Points	100 pts

Assessment and grading criteria for each laboratory experiment

Nine laboratory experiments (90%)	900 pts
Final Exam (10%)	100 pts
Total Possible Points	1000 pts

Criterion to calculate the final score

The letter grade for each learner will be assigned based on the percentages calculated from a possible total of 1000 points as below:

Course Grading Criteria	
>92%	A
87-92%	A-
82-87%	B
77-82%	C
67-77%	D
50-67%	E
<50%	F

Course Requirements, Assignments, and Deadlines

The course layout expects each learner to finish four tasks for each lab as described below:

- Listen to the online video lecture posted on Canvas and prepare for the experiment.
- Attend the face to face lecture prior to the lab to receive safe precautions and take the quiz.
- Perform the experiment carefully and record the data.
- Submit the post-lab exercise online via Canvas by the due date.

The fifth and final task is to take the final exam at the end of the semester.

Course Expectations, Policies, and Requirements for Student Conduct

Late Work Policy

Students are expected to attend the lab sessions in-time to take the quiz and receive safety precautions. Students will not be entertained to perform the lab upon late arrival. The assignments and lab reports must be turned in by the due date. No incompletes will be given. The post-lab reports are due by a week from the corresponding lab day. The reports must be submitted online via Canvas before the 11.59 pm on the due date. Late submission will not be accepted. However, late submissions will be accepted based on the situation, prior intimation and validity of the reason or during emergencies.

Professional Dispositions

The experimental nature of the course expects all the students to have a professional behavior while working in the lab. Each student should work through the experiment from beginning till the end independently. In order to perform the lab, the students must come prepared to arrange the experimental setup and know the safety data sheet of all the chemicals used in particular experiments. The students are asked to consult the lab instructor in case of any doubts as unwanted actions might lead to catastrophic results in the lab which puts all the students in danger. No room for personal relationships during the lab.

Responsibility

Each student is given a set of glass apparatus and a locker. It is their sole responsibility to main the cleanliness and integrity of the glass ware. The students are expected to follow precautions concerning

the personal safety and chemical safety. It is the responsibility of each chemist to ensure a safe lab environment through the lab session.

Calendar / Course Schedule

We will be meeting twice a week to carry out two experiments. The following table lists the tentative schedule of the course for this semester:

Date	Lab	Experiment
June 3rd, 2019	Introduction	Familiarization of the Course
June 5th, 2019	Lab 1	Significant Digits
June 10th, 2019	Lab 2	Separation of Mixtures
June 12th, 2019	Lab 3	Extraction of Copper
June 17th, 2019	Lab 4	Molecular Weight of Cyclohexane
June 19th, 2019	Lab 5	Titrations
June 24th, 2019	Lab 6	Calorimetry
June 25th, 2019	Lab 7	Determination of Hydration
July 1st, 2019	Lab 8	Organic Synthesis of DBA
July 3rd, 2019	Lab 9	Inorganic Synthesis of Alum
July 10th, 2019	Lab 10	Evolution of Gases
July 17th, 2019	Review	Discussion
July 24th, 2019	Finals	Final Exam

UMKC Resources & Policy Statements

Please refer to the following web page and the linked resources there on for critical information regarding course policies and resources. You are expected to abide by all the rules and regulations regarding student conduct referenced in these pages. <http://cas.umkc.edu/CPR/>

Academic Calendar: Students are encouraged to review important add, drop or withdraw dates: <http://www.umkc.edu/registrar/acal.asp>

Academic Honesty: The Board of Curators of the University of Missouri recognizes that academic honesty is essential for the intellectual life of the University. Faculty members have a special obligation to expect high standards of academic honesty in all student work. Students have a special obligation to adhere to such standards. Academic dishonesty, including cheating, plagiarism or sabotage, is adjudicated through the University of Missouri Student Conduct Code and Rules of Procedures in Student Conduct Matters.

Academic Inquiry, Course Discussion and Privacy:

Faculty allowing recording - University of Missouri System Executive Order No. 38 lays out principles regarding the sanctity of classroom discussions at the university. The policy is described fully in [Section 200.015 of the Collected Rules and Regulations](#). In this class, students may make audio or video recordings of course activity unless specifically prohibited by the faculty member. However, the

redistribution of any audio or video recordings of statements or comments from the course to individuals who are not students in the course is prohibited without the express permission of the faculty member and of any students who are recorded, including those recordings prepared by an instructor. Students found to have violated this policy are subject to discipline in accordance with provisions of Section 200.020 of the Collected Rules and Regulations of the University of Missouri pertaining to student conduct matters.

Attendance Policy: Students are expected to attend and participate in classes. Advance notice of attendance policies of academic units and individual instructors should be given, and such notice should be in writing. Students should notify instructors of excused absences in advance, where possible. Students who have an excused absence are expected to make arrangements with instructors for alternative or make-up work. Such arrangements should be made in advance of the absence, where possible. Instructors should accommodate excused absences to the extent that an accommodation can be made that does not unreasonably interfere with the learning objectives of the course or unduly burden the instructor. Attendance policies shall be applied in a non-discriminatory manner.

Campus Safety: Inclement weather, mass notification, and emergency response guide:
<http://www.umkc.edu/umkcalert/>

Counseling and Health Services Available at UMKC:

UMKC students may experience many challenges in their lives while attending college – stress, depression, suicidality, trauma, relationship issues, health concerns, etc. As your professor I care about your success and well-being and want to make you aware of some helpful resources on campus. The UMKC Counseling Center (www.umkc.edu/counselingcenter), located at 4825 Troost in Room 206, offers a wide range of supportive services to students. Appointments can be made by calling 816.235.1635. UMKC Student Health and Wellness (<http://info.umkc.edu/studenthealth/>), located at 4825 Troost in Room 115, offers a full range of health care and promotion services. Appointments can be scheduled online or by calling 816.235.6133. The Mind Body Connection (www.umkc.edu/mindbody) is located in the Atterbury Student Success Center in Room 112 and offers a variety of stress-reduction services.

Disability Support Services:

To obtain disability related accommodations and/or auxiliary aids, students with disabilities must contact the Office of Services for Students with Disabilities (OSSD) as soon as possible. To contact OSSD, call (816) 235-5696. Once verified, OSSD will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. For more information go to: <http://www.umkc.edu/disability/>

English Proficiency Statement:

Students who encounter difficulty in their courses because of the English proficiency of their instructors should speak directly with their instructors. If additional assistance is needed, students may contact the UMKC Help Line at 816-235-2222 for assistance.

Grade Appeal Policy:

Students are responsible for meeting the standards of academic performance established for each course in which they are enrolled. The establishment of the criteria for grades and the evaluation of student academic performance are the responsibilities of the instructor.

The University grade appeal procedure is available only for the review of allegedly capricious grading and not for review of the instructor's evaluation of the student's academic performance. Capricious grading, as that term is used here, comprises any of the following:

- The assignment of a grade to a particular student on some basis other than the performance in the course;
- The assignment of a grade to a particular student according to more exacting or demanding standards than were applied to other students in the course; (Note: Additional or different grading criteria may be applied to graduate students enrolled for graduate credit in 300- and 400-level courses.)
- The assignment of a grade by a substantial departure from the instructor's previously announced standards.

Discrimination Grievance Procedures for Students:

Discrimination Grievance Procedures for Students can be found here:

http://www.umsystem.edu/ums/rules/collected_rules/grievance/ch390/grievance_390.010

Statement of Human Rights:

The Board of Curators and UMKC are committed to the policy of equal opportunity, regardless of race, color, religion, sex, sexual orientation, national origin, age, disability and status as a Vietnam era veteran. Commitment to the policy is mentored by the [Division of Diversity, Access & Equity](#), but it is the responsibility of the entire university community to provide equal opportunity through relevant practices, initiatives and programs.

Title IX:

Under the University of Missouri's Title IX policy, discrimination, violence and harassment based on sex, gender, and gender identity are subject to the same kinds of accountability and support applied to offenses based on other protected characteristics such as race, color, ethnic or national origin, sexual orientation, religion, age, ancestry, disability, military status, and veteran status. If you or someone you know has been harassed or assaulted, you can find the appropriate resources by visiting UMKC's Title IX Office webpage (<http://info.umkc.edu/title9/>) or contacting UMKC's Title IX Coordinator, Sybil Wyatt (816.235.6910 or wyattsb@umkc.edu). Additionally, you can file a complaint using UMKC's online discrimination complaint form, which is located at <http://info.umkc.edu/title9/reporting/report-online/>.

While most UMKC employees are required to report any known or suspected violation of Title IX, students may seek confidential guidance from the following campus locations:

UMKC Counseling Service Volker Campus 5110 Oak St Ste 201, Kansas City, MO 64112 Phone – (816) 235-1635 Open – Mon thru Fri – 8 am to 5 pm	Student Health and Wellness Volker Campus 5110-5101, Oak St Kansas City, MO 64112 Phone - (816) 235-6133 Open – Mon thru Fri – 8 am to 5 pm
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UMKC Connect:

Important information is available to undergraduate students in UMKC Connect accessed through Blackboard. Throughout the term, students may receive emails regarding course grades or academic performance. Students are expected to address information posted in a timely fashion. This information may be shared with the student's Success Network made up his or her academic advisor(s) and other campus resources so that UMKC may fully support the student's success.

College of Arts & Sciences Course Policies & Resources:

Please refer to the following web page and the linked resources for critical information regarding course policies and resources. You are expected to abide by all the rules and regulations regarding student conduct referenced in these pages. <http://cas.umkc.edu/CPR/>

STUDENT INFORMATION QUESTIONNAIRE

(In order for me to make my instruction more personalized and helpful, I like to learn more about students as individuals. If you would, please fill out the information requested below, and return it to me within the first 2 weeks of the semester, either in my office or after class. I will retain this information on file only for this semester and will not be shared with others, but you are under no obligation to provide any or all of the data requested.)

PLEASE PRINT, AND THANKS!

NAME _____

WHERE ARE YOU FROM? _____

WHAT ARE YOUR PLANS ONCE YOU FINISH YOUR DEGREE PROGRAM?

PLEASE LIST THE NAMES OF COLLEGE/SCHOOL LEVEL CHEMISTRY COURSES YOU HAVE TAKEN BELOW (PLEASE ALSO INDICATE WHERE THESE WERE TAKEN):

PLEASE LIST THE NAMES OF COLLEGE/SCHOOL LEVEL MATH COURSES YOU HAVE TAKEN BELOW (PLEASE ALSO INDICATE WHERE THESE WERE TAKEN):

(Please use the back side of this page to provide me with any other relevant information, such as your class schedule and any scheduled commitments, such as work or service.)