
Calumet College



of Saint Joseph

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Calumet College of St. Joseph is a Catholic institution of higher learning dedicated to the academic, spiritual and ethical development of undergraduate and graduate students. Informed by the values of its founding religious community, the Missionaries of the Precious Blood (C.P.P.S.), the College promotes the inherent dignity of all people, social justice, an ethic of service, student empowerment, opportunity, and lifelong learning.

COURSE SYLLABUS, Fall 2017 (2017-1)**Course: CHEM200L GENERAL & ANALYTICAL CHEMISTRY I LAB-SECTION A**

Instructor Information:	
Instructor Name	Dr. Sandra Chimon Rogers
Office Number:	304
Phone Number:	219-473-4268 Cell/Text (773)719-8759 (please identify yourself first) Snapchat DrPeszek
Email:	drrogers@ccsj.edu Please let me know what class and section you are in.
Hours Available:	Monday and Wednesday 6:45AM to 8:30AM. Tuesday and Thursday 6:45AM to 9:30 AM. Monday – Wednesday 1:30-2:30ish. If you forget, all my hours are posted outside my office; however, sometimes I am there at other times. COME IN! No appoints are needed. If the door is open, come in! All are welcomed!
Instructor Background: <i>B.S University of Illinois (Chemistry); Ph.D. University of Illinois (Bioanalytical Nuclear Neurochemistry); Post-Doctoral Fellow, University of Illinois (Bioanalytical Chemistry); Adjunct Professor: National Louis University (2008), Prairie State College (2008-2009), Elmhurst College (2008-2009), Visiting Assistant Professor: DePaul University (2009-2011) and Assistant Professor of Bioanalytical Chemistry and Director of Undergraduate Studies (2011-2013). Director of the Science Program, Assistant Professor at Calumet College (2013-2016). Department Chair of Science, Math, and Behavioral Science (2015-2016). Director of the Biophysical Chemistry Program, Associate Professor at Calumet College (2016-present). Biophysical Chemistry and Math Department Chair (2016-present).</i>	
What does my research at Calumet College of St. Joseph entail?	
<ul style="list-style-type: none">Analyze structural and neurotoxic properties of neurodegenerative-disease related proteins and peptides, which are major suspects of Alzheimer's disease and Parkinson's diseaseUtilize various sample preparation techniques including but not limited to biochemical	

assays, kinetics, neurotoxic effects involving instrumentation such as fluorescence, UV/Vis, NMR (solution and solid state), FTIR, and electron microscopy.

The types of sciences which are involved in my research cover a broad range of interdisciplinary aspects from analytical chemistry, physical chemistry, biophysics, nanotechnology, bioanalytical, molecular biology, biochemistry, and neuroscience

Theoretically, everyone in this class could get an A. This fact means that you are never in competition with your classmates. I have this policy to encourage you to study in groups for the exams to help each other out. I encourage you to follow your performance using the grades that will be posted on Blackboard.

Course Information:	
Course Time:	10:15 AM - 11:45 AM, Mondays
Classroom:	CCSJ 332
Prerequisites:	Placement into MATH 104 or higher and concurrent enrollment in CHEM 200.
Required Books and Materials:	<p>Required on a daily basis</p> <ol style="list-style-type: none">1. **You will need any current copy of the periodic table to bring with you to class daily.2. **You will need a scientific calculator. The calculator on your phone does not count. The calculator does not need to be expensive. For example, a Texas Instruments TI-30X II will suffice (\$10 at a big box store).3. Lab Notebook4. Lab Goggles5. Access to a computer <p>Recommended but not required:</p> <ol style="list-style-type: none">1. Chemistry: Structure and Properties: By Niva Tro 1st edition, Pearson Publishing, ISBN# 978-03217297362. Lab Apron or Lab Coat
<u>Learning Outcomes/ Competencies:</u>	
I. Course Learning Objectives:	
<p>Students will: This is a list of very specific learning objectives for Chemistry 200 lecture and lab. The lab will provide hands-on opportunities to develop and apply this knowledge. Please note that for many of the topics in this course real world examples are used. On occasion, the topics result in brief discussions of economic and societal issues and some historical development can result in seeing the significance that science played in certain world events.</p>	
By the end of this course, students will be able to:	
<ol style="list-style-type: none">1) apply significant figures rules in all calculations providing the correct number of significant figures and units (Exp 1, 2, 6, 7, and 9)2) convert between different units using conversion factors and dimensional analysis (Exp. 1)3) name elements, provide their symbols and determine the number of protons, neutrons, electrons and nuclei in elements and compounds calculate percent composition given a molecular formula and molecular formula given the percent composition (Exp. 2)4) name salts, acids, bases and covalent compounds and provide formulas for these given a molecular formula (Exp. 3)	

- 5) explain the difference between solubility and dissociation in water and apply this knowledge to acids, bases and salts (Exp. 3)
- 6) identify weak and strong acids and bases and insoluble compounds using dissociation and solubility rules (Exp. 3 and 4)
- 7) construct molecular, total and net ionic equations for double displacement reactions (Exp. 3 and 4)
- 8) identify redox reactions including identifying the oxidation, reduction, oxidation agent and reducing agent (Exp. 5)
- 9) calculate oxidation numbers and balance redox reactions (Exp. 5)
- 10) perform stoichiometry calculations for chemical and non-chemical systems whether the limiting reactant is known or unknown (Exp. 6 and 7)
- 11) calculate molarity of a solution starting with pure solute or with a concentrated solution as well as explain how to prepare a solution of a given molarity (Exp. 6)
- 12) provide brief descriptions of the accomplishments of Planck, Einstein, Thompson, Rutherford, Millikan, Rydberg, Bohr, de Broglie and Schrodinger; and how these contributed to understanding the atom
- 13) explain how a cathode ray tube works and how it assisted in understanding the electronic configuration of atoms.
- 14) convert between wavelength, energy and frequency for light and understand the relationship between absorbed light and color (Exp. 7)
- 15) calculate the energy and wavelength of a given electronic transition in hydrogen (Exp. 7)
- 16) define what each quantum number represents and how to obtain quantum numbers for any electron in an atom
- 17) analyze an atom or ion of a given element providing the full electronic configuration, the abbreviated electronic configuration, the nlx notation, a representative diagram of the orbitals and the unpaired number of electrons; then use this information to determine the possible oxidation states of the element and the magnetic properties of the element (Exp. 8)
- 18) define electronegativity, electron affinity and ionization potential
- 19) organize a set of element or monoatomic ions in order of increasing atomic radius, ionic radius, first ionization energy and electronegativity
- 20) determine whether a bond is metallic, ionic, covalent or polar covalent
- 21) represent covalent and ionic bonding using Lewis dot structures
- 22) evaluate the molecular geometry, hybridization and polarity of a covalent molecule (Exp. 9)
- 23) evaluate the type of molecular bonding(s or p) in a covalent molecule and identify the orbitals used for bonding
- 24) explain the properties of temperature and pressure including how these are measured and convert between different units for these properties, including the use of different liquids in the measurement of pressure (Exp. 7)
- 25) derive the relationships between pressure, volume, temperature and moles for ideal gases; perform calculations using these relations, including when they are combined with stoichiometry or percent composition problems (Exp. 7)
- 26) define and apply Dalton's Law of Partial Pressures and Graham's Law of Diffusion and Effusion to mixtures of gases (Exp. 7)
- 27) use the results from the Kinetic Molecular Theory of Gases to explain the relationship between kinetic energy, average molecular velocity, temperature, pressure, density and number of collisions when an ideal gas undergoes a change of state
- 28) describe and provide examples of the five types of intermolecular forces and be able to analyze the forces present in a substance and organize a set of compounds in order of increasing intermolecular forces (Exp. 7)
- 29) define the terms and explain the temperature dependence of surface tension

II. This course meets the following General Education objectives:

- 1) Students will, at an introductory level, read analytically, synthetically, and critically in a variety of genres.
- 2) Students will, at an introductory level, write in a variety of forms using valid logic, persuasive rhetoric, and correct grammar, usage, and punctuation.
- 3) Students can, at an introductory level, represent, apply, analyze, and evaluate relevant qualitative and quantitative mathematical and scientific evidence (i.e. equations, graphs, diagrams, tables, words) to support or refute an argument.
- 4) The student will, at an introductory level, be able to apply ethical standards to social issues and analyze their own core beliefs and the origin of these beliefs.

More specifically when analyzing quantitative reasoning and scientific inquiry skills at the introductory level:

- 1) The student can perform correct, clear and concise calculations.
- 2) The student can interpret and explain information that is presented in mathematical forms (e.g. equations, graphs, diagrams, tables, words).
- 3) The student can analyze and apply quantitative and scientific data to make judgements and draw appropriate conclusions.
- 4) The student can identify assumptions in scientific inquiry (e.g. estimation, modeling, and data analysis) and evaluate the validity of inferences drawn from the data.
- 5) The student can express quantitative or scientific evidence in support of an argument or the purpose of work (with respect to what evidence is used and how it is formatted, presented, and contextualized).
- 6) The student can apply mathematical and scientific evidence to the understanding and evaluation of real world ethical, spiritual, and intellectual issues.

This course meets the following program objectives, at the introductory level:

- 1) Scientific Knowledge and Critical Thinking:
 - a) Students will demonstrate substantial and up to date core knowledge of broad areas in basic biomedical, translational, or clinical research.
 - b) Students will demonstrate the ability to accurately and critically evaluate their own scientific work and the work of others.
- 2) Research Skills and Problem Solving Ability:
 - a) Students will demonstrate advanced understanding of a range of technical and conceptual approaches used in biomedical research.
 - b) Students can design, carry out, and interpret research projects that generate new knowledge that advances the biomedical sciences and human health.
- 3) Specific Expertise:
 - a) Students can articulate the significance of their own work to their chosen research area in both historical and forward-looking contexts.
 - b) Students will demonstrate mastery of a range of technical and conceptual approaches used in their selected research area.
- 4) Communication:
 - a) Students will demonstrate the oral, written and media communication skills required to be effective communicants, teachers and mentors of peers, future scientists and scientifically literate citizens
- 5) Ethics and Advocacy:
 - a) Students will apply highest standards of ethics to their research (data management, research subjects, stewardship of research funds)

- b) Students will improve their confidence and interactions with colleagues and the public.
- c) Students will be able to advocate for the role of science in medicine and society

Course Description: A 1-credit hour course implementing through experiments the general and analytical topics including stoichiometry, periodicity, reaction types, the gaseous state, solution stoichiometry, chemical equilibria, acid-base equilibria, dissolution-precipitation equilibria.

Learning Strategies:

Active learning, Blackboard, group discussions, team projects, collaborative learning, interactive lecturing, laboratory exercises, demonstrations

Experiential Learning Opportunities:

In class discussion, comprehension and critical thinking along with laboratory experience is essential for a fundamental understanding of the scientific method. This course has a required laboratory portion that provides students with experiential learning through experimental design, hypothesis development, data interpretation, and communication of results through laboratory reports. The laboratory section of this course additionally has students create and prepare bi-weekly lab reports on their way to better prepare them for a publication-quality research paper. Alongside the weekly lab reports, the students will prepare a final poster at the end of the semester to be presented and submitted to a local conference and/or our semester end poster session at the University.

Assessments:

The percent values for each category of assessment are listed below. Percent values for each category are normalized for each task and may be adjusted to reflect actual number of assignments, quizzes, etc., at the professor's discretion and any changes made during the semester supersede the point values reflected here; changes will be announced in class and posted on Blackboard.

CATEGORY	DESCRIPTION	PERCENT
Lab Reports	Given at the beginning of semester including the rubrics, background information, sample writing, pre-lab assignments, post lab assignments, and required materials for each lab. Each complete lab is worth 40 points. 9 labs will be performed. 8 out of 9 labs will count (lowest 1 is dropped).	80%
Lab Practical	To test basic skills to acquire throughout the semester with respect to hands on skills.	10%
Final Poster Presentation	Cumulative Poster presentation to share lab thoughts, experiences, etc.	10%
	TOTAL PERCENT	100%

Each experiment is worth 40 points that are distributed across a pre-laboratory assignment, a written report or worksheet, and a laboratory category (e.g. preparedness, goggle use, etc.). Each week a specific grading rubric for that week's laboratory will be posted online.

The instructor will use the scheme on the rubric to grade the report. Any student concerns about grading on laboratory reports or other evaluated work must be addressed within one week after receipt of the graded material. The lowest laboratory score will be dropped and the grade computed out of the remaining scores. The percentage score will be determined, and the following scale applied.

Grading Scale:

100 – 92: A	91 – 90: A-	
89 – 88: B+	87 – 82: B	81 – 80: B-
79 – 78: C+	77 – 72: C	71 – 70: C-
69 – 68: D+	67 – 62: D	61 – 60: D-
59 and below	F	

Note: Concerns about assignment or exam grading must be brought to my attention, in person, immediately after obtaining a copy of your exam from my office.

Furthermore, concerns about your overall performance in the course must be brought to my attention before the final exam. Your grades are posted to date on Blackboard. Please feel free to keep up to date with them and ask any questions that arise immediately. I will not accept any late and/or missing assignments after the due date; therefore, please keep in mind that it is your responsibility to keep track of the grades posted in your Blackboard account for this class. Do not contact me after the final exam requesting extra credit or points to receive a grade you want (but did not earn).

Due to privacy concerns and respect for you and your grades, attempts to discuss grades or grading

Course Schedule:

Lecture	
Week 1: Sept 5-9	<i>NO CLASS ON SEPT 4</i>
Week 2: Sept 11-16	Introduction, Safety and Ethics – Assessment Exam. Syllabus Quiz. Lab Safety exam
Week 3: Sept 18-23	Lab 1: Spreadsheet and graphing
Week 4: Sept 25-30	Lab 2: Introduction to volumetric glassware
Week 5: Oct 2-7	Lab 3: DMHO
Week 6: Oct 9-14	Lab 4: Introduction to Spectroscopy
Week 7: Oct 16-21	Lab 5: Empirical formula of a compound
Week 8: Oct 23-28	Lab 6: Molecular Modeling
Week 9: Oct 30-Nov 4	Halloween Demo (counts as in class assignment) on Halloween Day.
Week 10: Nov 7-11	Lab 7: Limiting Reactant
Week 11: Nov 14-18	Lab 8: The copper cycle
Week 12: Nov 21-25	Lab 9: Introduction to titration
Week 13: Nov 28-Dec 2	Lab Practical
Week 14: Dec 5-9	Poster Presentation
<i>FINALS WEEK: DEC 11-17</i>	No Labs

I reserve the right to change this schedule to meet the needs of the class.

Responsibilities

Responsibilities	
Attending Class	You cannot succeed in this class if you do not attend. We believe that intellectual growth and success in higher education occur through interaction in the classroom and laboratories. However, we do not want to penalize students for participating in college-sponsored events. When

you miss class because of a college event, you must give notice of your absence in advance, and you are responsible for all missed work. Being absent doesn't excuse you from doing class work; you have **more** responsibilities to keep up and meet the objectives of this course.

Attendance is counted as being present from the first 10 minutes of class until the end of lecture and lab. It is the students' responsibility to make attendance a priority. Anyone missing after the first 10 minutes of class will be marked absent unless a written excuse is provided within 24 hours of the occurrence. Similarly, anyone leaving early without a written excuse and/or informing the instructor prior to leaving will be counted as absent.

First lab class is on Monday, September 11th, 2017. These times will be used for lecture, to discuss homework, review material for exams, and administer exams, quizzes, and in-class assignments. Please remember that you are participants during these hours. In order to get the most out of each class, you should read the material we will cover prior to coming to class and **bring a calculator and periodic table DAILY** so that you can participate in in-class activities.

It is to your benefit to attend each class meeting. ***You are responsible for all material presented in class and all in-class announcements and assignments.*** Attendance is mandatory, however, for all examinations since they ***cannot be made up*** at a later date will not be excused without a valid excuse. The validation of the excuse is left to the discretion of the instructor of the course whether or not to accept that excuse.

*Validated proof must be received by the instructor as soon as humanly possible. The proof of validation will not be accepted no later than the day the exams are to be returned. Once the exam is returned, there will be no exceptions and/or excuses that will be allowed. With respect to in class activities, no make-ups what so ever for any of the in class assignments and/or quizzes. **Any** exceptions are left to the discretion of the instructor.*

Train delays, broken down cars, oversleeping, forgetting, and other personal business are examples of invalid excuses. Additionally, you should plan to arrive on time and remain throughout the lecture to avoid disrupting the class. Other classroom disruptions, such as cell phones, pagers, etc. are unacceptable; these devices should be turned off before the start of class.

80% of success is showing up -Woody Allen

There are only 27 class meetings in a given semester, 4 of those class meetings are exams and 1 is the initial introduction day, therefore each class meeting covers ~8% of the course material. You are responsible for your own education. Based on the calculations below, The basic, full-time tuition rate for the academic year, (not including housing, fees, student health etc.) is approximately \$17,500. There are a total of 32 hours of class time in a semester; this means that at the very minimum for **every hour of class costs you about \$86**. You have already paid for

	<p>this class and it is up to you to make the most out of this investment. If for whatever reason you have to miss class, please approach your fellow students for the notes you missed, and take advantage of the class materials that will be posted on Blackboard http://class.ccsj.edu</p> <p>Intellectual growth and success in college is reinforced through interaction in the classroom. Students reach personal goals and course outcomes through regular and prompt attendance. <u>Therefore, two (2) unexcused absences will result in an administrative withdrawal from the course. We only have 10 meeting times.</u></p> <p>Participation through regular attendance is required to be successful in this course. Therefore, if a student is absent more than two (2) times (excessive tardiness is counted as absence), the student will be subjected to a grade of F or FW per policy stated under the Withdrawal from Classes section on this syllabus.</p> <p><u>In the event of absence during a lab, the student will receive a ZERO (0) on that lab.</u> The lowest lab score is dropped, so that lab score will not be considered when determining the final grade. If a student is absent during more than one lab, the student will receive a ZERO (0) for each missed lab, but only one grade will be dropped. It is the student's responsibility to ensure attendance on lab dates.</p>
<p>Turning In Your Work</p>	<p>You cannot succeed in this class if you do not turn in all your work on the day it is due.</p> <p>Due dates are specified for each assignment on Blackboard and the assignments. You will be given an assignment each and every day that we meet; any changes will be announced in class and posted on Blackboard.</p> <p>LAB REPORTS WILL NOT BE ACCEPTED AFTER THEIR DUE DATES. You may request an extension in writing at least 24 hours in advance of the due date for assignments, but it is up to the instructor's discretion whether or not to allow an extension.</p> <p>If you are absent the day that an assignment is due, follow these guidelines:</p> <ul style="list-style-type: none"> • turn in the lab report via Blackboard <u>on its scheduled due date</u> • Turn in the hard copy of the lab report the day you return. <p>See "attending class" above. All assignments can be submitted via e-mail if a link is not provided through Bb. It is the students' responsibility to request extensions in writing to the instructor.</p>
<p>CCSJ Student Honor Code</p>	<p>This course asks students to reaffirm the CCSJ Student Honor Code: I, as a student member of the Calumet College academic community, in accordance with the college's mission and in a spirit of mutual respect, pledge to:</p> <ul style="list-style-type: none"> • Continuously embrace honesty and curiosity in the pursuit of my educational goals; • Avoid all behaviors that could impede or distract from the

	<p>academic progress of myself or other members of my community;</p> <ul style="list-style-type: none"> • Do my own work with integrity at all times, in accordance with syllabi, and without giving or receiving inappropriate aid; • Do my utmost to act with commitment, inside and outside of class, to the goals and mission of Calumet College of St. Joseph.
<p>Using Electronic Devices</p>	<p>Electronic devices can only be used in class for course-related purposes. If you text or access the Internet for other purposes, you may be asked to leave, in which case you will be marked absent. In order to minimize distractions in the classroom, please turn off the sound on cell phones and pagers and keep classroom chatter and eating noises to a minimum.</p> <p>No social media chatting/texting will be allowed to be used during lecture or lab times unless otherwise directed by the instructor. No videotaping or recording of lecture without written consent and discretion of the instructor. The instructor reserves the right to ask you to leave the room if you interrupt the class.</p> <p>The science faculty will address electronic device use as follows:</p> <p>Occurrence</p> <ul style="list-style-type: none"> • 1st – Student is given a verbal warning. • 2nd - Student is instructed to leave the classroom. <p>The student cannot return to class until they have met with the professor.</p> <ul style="list-style-type: none"> • 3rd - Student is instructed to leave the classroom. <p>The student cannot return to class until they have met with the V.P. of Academic Affairs.</p> <p><i>Things can and do happen. If someone really needs to reach you while you are in class, please inform the professor at the beginning of class. You can set your device to "vibrate" and answer your phone call in the hallway.</i></p> <p>In order for the lectures to flow smoothly and for the class to get the most of the time spent together, I request that the use of the podium computer be prohibited 10 minutes prior to lecture and 10 minutes post lecture.</p>
<p>Participating in Class</p>	<p>Participation will be expected during in-class active learning exercises in order to receive full credit for those assignments.</p> <p>A careful reading of the laboratory manual is required before performing an experiment. You should have a clear understanding of the theory behind the experiment, the reaction(s) that will be studied, and any data analysis or calculations that must be completed. In order to ensure that you are prepared for the laboratory experiment, you will be asked to both prepare your lab notebook and complete a pre-laboratory assignment.</p> <p>a. Pre-lab Questions: In order to gain entrance to the lab, students must present a completed pre-laboratory assignment to the laboratory instructor. The pre-laboratory assignments are part of the laboratory instruction materials. If a student arrives without</p>

a completed pre-laboratory assignment, the laboratory instructor has the right to ask the student to leave the lab. In this case, the student will be considered to have an unexcused absence from the lab.

- b. **Laboratory Notebook Preparation:** No laboratory instruction materials will be allowed in the laboratory unless otherwise informed by the instructor. Any specifics about the procedure must be recorded in the laboratory notebook before the laboratory period begins. If a student arrives unprepared for lab, the laboratory instructor has the right to ask the student to leave the lab. In this case, the student will be considered to have an unexcused absence from the lab.
- c. **Laboratory Notebook and Related Scientific Ethics:** You must record all data in an official course laboratory notebook. This is a spiral bound notebook that may be obtained from the bookstore. Make sure that you write your name on your notebook and supply any other pertinent contact information that can be used to return the notebook to you in case it is lost.

One goal of this course is to introduce you to the proper manner of keeping a laboratory notebook. The rules of notebook keeping delineated below are all aimed at ensuring that your notebook is a faithful and complete representation of your work in the lab. Ethically, a scientist cannot remove evidence of any work they have done from the lab notebook. Incorrect work can be noted as such, but anyone looking at your notebook should be able to observe any errors you have made. Additionally, a scientist cannot prove they first discovered something if evidence of this discovery is not present in a lab notebook with the date on which the discovery was made, and the signature of a witness to the discovery. Scientists rely on the information present in laboratory notebooks to avoid repeating mistakes and make efficient progress. For all of these reasons, you will be asked to maintain a high-quality laboratory notebook.

All data recorded in the laboratory notebook must be recorded in **black or dark-blue ink only**. Notes taken in pencil, or in pencil overwritten in pen, will reduce the laboratory notebook score. You will be making a carbon copy of your data. Make sure your carbon copies are clear and legible. Press hard and use the inside flap of the notebook to protect other sheets. **NEATNESS COUNTS!** The instructor will verify your data and calculations. If the instructor cannot read your data sheets because of bad penmanship, organization, or other neatness factors, your report grade may suffer.

If you make a mistake, delete entries by crossing them out neatly with a single line. This practice ensures that anyone who sees your notebook can see any errors you have made, as well as your correct work. You cannot write your work on scrap paper; any scrap paper notes found will be confiscated and not returned. Before leaving the laboratory have the laboratory instructor sign

the page(s) with your data and turn in the duplicate(s) of the page(s) you worked on. Original pages should **never** be torn from the notebook. The notebook should retain an intact sequence of numbered pages. Please be aware that your laboratory notebook is subject to inspection to verify and authenticate your experimental observations.

The notebook pages must contain any and all pieces of information needed to obtain the final results for the experiment. Such information includes, but is not limited to:

- The title of the experiment
- The name of your laboratory partner, if applicable
- The date of the experiment
- The procedure for the experiment (**not** a word-for-word copy of the lab manual contents, but your notes that will allow you to complete the experiment)
- A detailed list of procedural changes
- A detailed list of equipment and its condition
- Clearly written data with *proper significant figures* and *units*, in tabular form
- Clearly written calculations with proper significant figures and units

The burden is on you to make sure you have all of the data that is necessary to write a successful laboratory report. Performing the calculations before leaving lab will help make sure that you have all of the necessary data. Every student in the lab will have their notebook reviewed by the instructor. This is to occur after the completion of every lab meeting. You will be graded on how you prepare and maintain your laboratory notebook, the accuracy of your calculations, and the accuracy of your results.

Laboratory Rules: If you fail to adhere to the safety rules delineated below you will not be allowed to remain in lab. Behavior that is deemed by the instructor to be unsafe to yourself or to others will result in your dismissal from that week's experiment. You will not be allowed to finish the lab at a later time.

- The use of cell phones in the laboratory is strictly forbidden. Your cell phone must be turned off for the duration of the laboratory period.
- If you are pregnant, you must obtain a letter from your obstetrician that states that it is safe for you to conduct experiments during the quarter and you must submit this letter to your lab instructor.
- Safety glasses/goggles must be worn at all times in the lab. Contact lenses are not recommended; wear prescription glasses instead.
- Open-toes shoes, shorts, skirts, short-sleeved shirts, tank-tops, and excessively loose or flowing clothes are forbidden in the lab. You must adhere to the lab attire rules or you will be asked to leave the lab.

- Smoking, eating, drinking, gum chewing, and applying cosmetics in the lab are prohibited.
- Long hair must be tied back.
- Gloves must be worn when handling chemicals. You must remove your gloves before exiting the laboratory. Always wash your hands after each lab.
- Never use your mouth to pipette a liquid; use a pipette bulb.
- Never leave experiments unattended.
- Never return excess chemicals to the stock bottle.
- Dispose of waste in the appropriately-labeled containers ONLY.
- Always return equipment in its original condition and to its original location.
- Clean up after yourself. Clean your part of the laboratory bench at the end of your stay in the lab. Points will be taken off the lab report grade if the balance room or the laboratory is left untidy.

General Laboratory Guidelines:

- Know the locations of the safety shower, eye wash stations, and first aid kit in the lab.
- Report all personal injuries to the instructor who will assess the wound and summon professional help if necessary.
- Assume the chemicals are dangerous unless you are told otherwise.
- Work only with clean equipment and glassware (dry) on a clean bench top.
- Carefully handle and measure appropriate quantities of the reagents needed in the experiment.
- Use the right chemicals – pay attention to the names of the chemicals you plan to use. You could cause a serious accident if you mix the wrong chemicals.
- Save all solutions and solids until you have successfully completed the experiment.
- Manage your time wisely so that you do not rush or take short cuts.
- Record all data in ink in your laboratory notebook while you work! Do not write data, even temporarily, on scraps or other pieces of paper. Make sure your data is complete. Make sure to record the date or the unknown number, if any.
- If you do not know or are unsure about any aspect of your experiment, ask the instructor.

Your preparedness and behavior in lab will be evaluated as part of your lab report grade. If you follow the rules and guidelines stated above, earning these points should be straightforward.

Laboratory Reports/Worksheets: Laboratory reports or worksheets are typically due one week after the completion of an experiment. No late work will be accepted. Students should use the posted rubric as a guide when preparing the laboratory report or worksheet. The rubric must be printed and attached as a cover sheet for the reports or worksheets, which must be submitted to the laboratory instructor upon entry to the laboratory session unless otherwise indicated.

	<p>a. Only hardcopies of reports or worksheets will be graded. In addition, electronic copies of the laboratory reports must be submitted to the corresponding experiment's dropbox on Blackboard (Bb). Hand-written calculations do not need to be submitted electronically. Failure to upload your lab report to the appropriate digital dropbox on time will automatically result in a 5-point deduction in your lab report grade (12.5% of your grade). Please note that all laboratory reports submitted electronically will be examined using <i>Turn-It-In</i> technology in order to ensure that the work is your own creation.</p> <p>b. In instances of excusable absences from lab, the student must make every effort to deliver the previous week's report or worksheet on time. If it is impossible to deliver a hard copy of the report or worksheet on time, an electronic version should be submitted to Bb before the start of the lab. A hard copy must then be delivered as soon as possible to the laboratory instructor (or placed in the instructor's mailbox in the chemistry department office). The hard copy of the report must be received before the start of the next laboratory period. Any substantive differences between the electronically submitted and hard copies of the laboratory report will not be graded.</p> <p>Laboratory Resources: The lab instructor has office hours during which they can answer questions regarding pre-lab assignments, calculations from a lab, the writing of lab reports, etc. If you have questions regarding the formatting, organization, etc. of your lab report, you should refer first to the rubric for the lab and the lab report writing guidelines; both of these are available on Bb. If you still have questions, you should contact the lab instructor. With enough notice, they may be able to look over a rough draft of your report. In addition, the Student Success Center has tutors familiar with writing lab reports that can help you revise a rough draft. In all cases, it is important to schedule an appointment several days before your report is due.</p>
<p>Doing Your Own Work</p>	<p>If you turn in work that is not your own, you are subject to judicial review, and these procedures can be found in the College Catalog and the Student Planner. The maximum penalty for any form of academic dishonesty is dismissal from the College.</p> <p>Using standard citation guidelines, such as ACS, MLA or APA format, to document sources avoids plagiarism. The Library has reference copies of each of these manuals, and there are brief checklists in your Student Handbook and Planner.</p> <p>PLEASE NOTE: All papers may be electronically checked for plagiarism.</p> <p><u>Cheating on Exams</u> Cheating on exams comes in two forms: (1) Communicating with others in any form, either verbally or nonverbally, as a way of sharing information during an exam; (2) Bringing in some sort of aid, such as notes, to assist you during the taking of an exam. To help facilitate</p>

	<p>honest test taking, I will require that all cell phones be shut off and put away, all tables cleared, and all hats removed, during all exams.</p> <p><u>Plagiarism</u> Plagiarism is the presentation of the ideas, opinions, or the writings of others as though it were your own. Plagiarism is stealing. It is dishonest, unethical, and illegal. It is also not a very smart approach to school, because it defeats the point of your being here, namely, to improve your own powers of thought and expression.</p> <p><u>Consequences of Academic Dishonesty</u> I have zero tolerance for cheating or plagiarism in my classroom. If you are caught cheating on an exam, or if you are caught plagiarizing on a written assignment, you will receive a zero on that exam or written assignment without impunity. You will not be given the opportunity to retake an exam, or to drop or rewrite the assignment. I will also turn the matter over to the proper channels for further possible action. I will have no reservations reporting this activity.</p> <p>If an instructor or other Calumet College of St. Joseph personnel find that a student has plagiarized or been involved in another form of academic dishonesty, the instructor or other personnel may elect to bring the matter up for judicial review. The maximum penalty for any form of academic dishonesty is dismissal from the College. The procedures for judicial review are listed under the section of CCSJ handbook that addresses student grievances.</p>
Tracking Your Progress	Your midterm grade will be available on MyCCSJ between Weeks 6 and 8. Be sure to see how you're doing and follow up with your instructor.
Sharing Your Class Experience	At the end of the term, you will have the opportunity to evaluate your classroom experience. These confidential surveys are <i>essential</i> to our ongoing efforts to ensure that you have a great experience that leaves you well prepared for your future. Take the time to complete your course evaluations – we value your feedback!
Withdrawing from Class	After the last day established for class changes has passed (see the College calendar), you may withdraw from a course by following the policy outlined in the CCSJ Course Catalog.

Resources	
Student Success Center:	The Student Success Center provides faculty tutors at all levels to help you master specific subjects and develop effective learning skills. It is open to all students at no charge. You can contact the Student Success Center at 219 473-4287 or stop by the Library.
Disability Services:	Disability Services strives to meet the needs of all students by providing academic services in accordance with Americans with Disabilities Act (ADA) guidelines. If you believe that you need a "reasonable accommodation" because of a disability, contact the Disability Services Coordinator at 219-473-4349.

Student Assistance Program	This free and confidential counseling service is available on-campus to help you deal with personal issues. The counseling office is in Room 301. You can reach them at 219 473-4362 (on campus) or 219-736-4067.
CCSJ Alerts:	Calumet College of St. Joseph's emergency communications system will tell you about emergencies, weather-related closings, or other incidents via text, email, or voice messages. Please sign up for this important service annually on the College's website at: http://www.ccsj.edu/alerts/index.html .

Emergency Procedures

MEDICAL EMERGENCY

EMERGENCY ACTION

1. Call 911 and report incident.
2. Do not move the patient unless safety dictates.
3. Have someone direct emergency personnel to patient.
4. If trained: Use pressure to stop bleeding.
5. Provide basic life support as needed.

FIRE

EMERGENCY ACTION

1. Pull alarm (located by EXIT doors).
2. Leave the building.
3. Call 911 from a safe distance, and give the following information:
 - Location of the fire within the building.
 - A description of the fire and how it started (if known)

BUILDING EVACUATION

1. All building evacuations will occur when an alarm sounds and/or upon notification by security/safety personnel. **DO NOT ACTIVATE ALARM IN THE EVENT OF A BOMB THREAT.**
2. If necessary or if directed to do so by a designated emergency official, activate the building alarm.
3. When the building evacuation alarm is activated during an emergency, leave by the nearest marked exit and alert others to do the same.
4. Assist the disabled in exiting the building! Remember that the elevators are reserved for persons who are disabled. **DO NOT USE THE ELEVATORS IN CASE OF FIRE, DO NOT PANIC.**
5. Once outside, proceed to a clear area that is at least 500 feet away from the building. Keep streets, fire lanes, hydrant areas and walkways clear for emergency vehicles and personnel. The assembly point is the sidewalk in front of the college on New York Avenue.
6. **DO NOT RETURN** to the evacuated building unless told to do so by College official or emergency responders.

IF YOU HAVE A DISABILITY AND ARE UNABLE TO EVACUATE:

Stay calm, and take steps to protect yourself. If there is a working telephone, call 911 and tell the emergency dispatcher where you are **or** where you will be moving. If you must move,

1. Move to an exterior enclosed stairwell.
2. Request persons exiting by way of the stairway to notify the Fire Department of your location.
3. As soon as practical, move onto the stairway and await emergency personnel.
4. Prepare for emergencies by learning the locations of exit corridors and enclosed stairwells. Inform professors, and/or classmates of best methods of assistance during an emergency.

HAZARDOUS MATERIAL SPILL/RELEASE

EMERGENCY ACTION

1. Call 911 and report incident.
2. Secure the area.
3. Assist the injured.
4. Evacuate if necessary.

TORNADO

EMERGENCY ACTION

1. Avoid automobiles and open areas.
2. Move to a basement or corridor.
3. Stay away from windows.
4. Do not call 911 unless you require emergency assistance.

SHELTER IN PLACE

EMERGENCY ACTION

1. Stay inside a building.
2. Seek inside shelter if outside.
3. Seal off openings to your room if possible.
4. Remain in place until you are told that it is safe to leave.

BOMB THREATS

EMERGENCY ACTION

1. Call 911 and report incident.
2. If a suspicious object is observed (e.g. a bag or package left unattended):
 - Don't touch it!
 - Evacuate the area.

TERRORISM AND ACTIVE SHOOTER SITUATIONS

EMERGENCY ACTION

1. Call 911 and report intruder.

RUN, HIDE OR FIGHT TIPS:

1. **Prepare** – frequent training drills to prepare the most effectively.
2. **Run and take others with you** – learn to stay in groups if possible.
3. **Leave the cellphone.**
4. **Can't run? Hide** – lock the door and lock or block the door to prevent the shooter from coming inside the room.
5. **Silence your cellphone** -- use landline phone line.
6. **Why the landline?** It allows emergency responders to know your physical location.
7. **Fight** – learn to “fight for your life” by utilizing everything you can use as a weapon.
8. **Forget about getting shot – fight!** You want to buy time to distract the shooter to allow time for emergency responders to arrive.
9. **Aim high** – attack the shooter in the upper half of the body: the face, hands, shoulder, and neck.
10. **Fight as a group** – the more people come together, the better the chance to take down the shooter.

11. Whatever you do, do something – “react immediately” is the better option to reduce traumatic incidents.

Semester I (Fall)-2017

August 16 – 18	Faculty Welcome Week
August 21	Education Classes Begin
August 30	GENL 100A – College Survival Freshman Orientation
August 31	GENL 100T – College Survival Transfer Student Orientation
September 4	Labor Day
September 5	Traditional Classes Begin
September 5	Tuition payment due
September 5	Accelerated Classes Begin
September 11	Last day for class changes (add/drop)
September 29	Last day to withdraw from a course without instructor approval
October 2	Mid-term
November 23 – 25	Thanksgiving recess
December 8	Last day to withdraw from a course with instructor approval
December 9	Traditional Classes end
December 10 – 16	Semester examinations
December 14	Accelerated Classes end
December 17	December graduation (ceremony in May)
December 18-22	Intersession Classes