Course Description
This course is a continuation of CHE 105. The course studies the principles and laws concerning the structure and behavior of matter.
Prerequisite: CHE 105

Meeting Times and Location
M, W 11:00 am; Room 3E12

Instructor and Office
David Edelbach
Office: 3H14
Office phone: (815)288-5511 ext. 364
email: edelbad@svcc.edu

Office hours:
M 9:30-10:50, 12:20-1:20
W 9:30-10:50
Th 10:45-12:15

Materials
Lab Manual: *Laboratory Studies for General Chemistry II*, David Edelbach

Grade Determination
A. Exams
   1. There will be four unit exams worth 100 points each.
   2. There will be a comprehensive final worth between 200 and 250 points.
   3. If you miss an exam the percentage from the comprehensive final will used as the percentage for the missed exam. Talk to me if you miss more than one exam.
   4. One or two class tests will be given on Thursday during the laboratory period.
B. Quizzes
   There will be daily quizzes. All quizzes combined are worth 100 points. The three lowest quiz scores will be dropped. No makeup quizzes will be given. Only 5 minutes will be allowed to complete the quiz. Quizzes will be given at the beginning of the class. Some quizzes covering lecture material may be given during the laboratory period. Being late to class will reduce the amount of time you have for the quiz by the number of minutes you are late.
C. Laboratory
   Laboratory will contribute 20% to the overall course grade.
D. Final grade will be based on percentage of total points obtained.
   90-100% A, 80-89% B, 70-79% C, 60-69% D, < 60% F
E. No points will be given for attendance.

Suggestions for Studying
A. Review class notes.
B. Rework problems done in class.
C. Work assigned problems.
D. Be able to do the items listed on the objective sheets.
Laboratory
A. Laboratory assignments consist of report sheets and questions, both of which are in the laboratory manual.
B. Laboratory assignments will be turned in at the end of the laboratory class.
C. Laboratory assignments will be worth 10-20 points.
D. A final written test will be given the last day of lab. It will be worth between 20 and 25% of your laboratory score.
E. You can make up one missed laboratory exercise at the end of the semester if it will make a difference in your overall course grade. If you’d like to make up the missed lab, contact the instructor.
F. Missing more than three laboratory periods is the basis for being dropped from the class.

Tentative Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Chapters</th>
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<tbody>
<tr>
<td>1-3</td>
<td>10, Solutions</td>
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<td></td>
<td>11, Rate of Reaction</td>
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<td></td>
<td>Test, Chapters 10,11</td>
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<tr>
<td>4-6</td>
<td>12, Gaseous Chemical Equilibrium</td>
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<td>13, Acids and Bases</td>
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<td></td>
<td>Test, Chapters 12,13</td>
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<tr>
<td>7-10</td>
<td>14, Equilibria in Acid-Base Solutions</td>
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<td>15, Complex ions</td>
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<td>Test, Chapters 14,15</td>
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<tr>
<td>11-14</td>
<td>16, Precipitation Equilibria</td>
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<td></td>
<td>17, Spontaneity of Reaction</td>
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<td></td>
<td>Test, Chapters 16,17</td>
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<tr>
<td>15</td>
<td>18, Electrochemistry</td>
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<td></td>
<td>Bonus Chapter 1?</td>
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<td>Final, Comprehensive, Chapter 10-18 (and Bonus Chapter!)</td>
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**Outcomes**

A. Solutions
   Students will calculate and convert concentration units, describe the dissolution process, predict solubilities and work problems involving colligative properties.

B. Chemical Kinetics
   Students will indicate the factors affecting reaction rate, explain the energy requirements for a reaction, derive and work quantitative problems involving rate expressions, and work problems involving concentration-time relationships.

C. Chemical Equilibrium
   Students will explain the concepts involved in chemical equilibria, derive and work problems involving the equilibrium constant expression for chemical reactions, and work problems involving LeChatlier’s principle.

D. Acid and Bases and Their Equilibria in Solution
   Students will complete acid base reactions, work quantitative problems involving pH and pOH, derive and work problems involving acid dissociation constant expressions, describe the nature of buffers and how they can be made, and work quantitative problems for titrations.

E. Complex Ions
   Students will write, label, and describe all the important components and concepts of coordination compounds including ligands, chelating agents, coordination number, geometry, and electron configuration of the metal cation, and formation constants.

F. Precipitation Equilibria
   Students will write equations and Ksp expressions for precipitations reactions, work quantitative problems involving Ksp expressions and the common ion effect.

G. Thermodynamics
   Students will explain the significance of the laws of thermodynamics, and work quantitative problems involving ΔH, ΔS, ΔG and K for any reaction.

H. Electrochemistry
   Students will balance redox reactions, draw and label a diagram for any voltaic cell, calculate cell potentials, and solve quantitative problems involving electrolysis.

Objective examinations, quizzes, and lab exercises will determine student comprehension of all outcomes.
Attendance Policy
SVCC believes in the importance of attending and being on time for scheduled classes. This reflects the personal responsibility required of each citizen in work, social, and community settings. If students must miss a scheduled class or be late, it is their responsibility to notify instructors.

Grading and Make-up Policy
SVCC believes that graded material must be turned in on or before the deadline that is set by the instructor. Failure to turn in work as scheduled may result in a zero or some other penalty indicated by the instructor.

 Civility/Etiquette
SVCC believes that all students should feel free to participate fully during their own learning experience; however, impolite or distracting behavior detracts from the learning experience of others and has no place in the classroom. Therefore, respectful, considerate, and active participation is expected in all classrooms and school settings. In addition, students should be receptive to instructor feedback and new ideas.

Incomplete Grade
SVCC understands that sometimes it is impossible to complete a course due to an unforeseeable circumstance. With instructor approval, the incomplete grade (I grade) allows a student to make-up a major exam or project after the semester has officially ended. The Incomplete grade is not designed to be used in place of a Withdrawal (W grade) and is only used at the discretion and approval of your instructor and the college's Academic Deans. The instructor and the student must complete an incomplete contract that the instructor will provide to you.

Withdrawal Policy
SVCC has a college wide withdrawal policy found at (svcc.edu/students/right-to-know/withdrawal.html). Students not following the policies found within this syllabus are subject to withdrawal at any time by their instructor.

Cheating and Plagiarism
Students that are caught cheating or having plagiarized will be subject to disciplinary action including academic expulsion.

Acceptable Use of Technology
Students should turn off all electronic devices while in the classroom unless they have the consent of the instructor. Electronic items include, but are not limited to cell phones, lap tops, tablets, MP3 players, voice and video recorders. Students violating this policy may face college disciplinary action. Also, students are subject to the SVCC Acceptable Use Policy (svcc.edu/about/policies/aup.html). Any violations of that would be handled at the institutional level.

Assessment
Sauk Valley Community College is an institution dedicated to continuous instructional improvement. As part of our assessment efforts, it is necessary for us to collect and analyze course-level data. Data drawn from students' work for the purposes of institutional assessment will be collected and posted in aggregate, and will not identify individual students. Your continued support in our on-going effort to provide quality instructional services at SVCC is appreciated.

Privacy
The College policy on student records complies with the "Family Educational Rights and Privacy Act". This Act is designed to protect the privacy of education records, to establish the rights of students to inspect and review their education records, and to provide guidelines for correction of incorrect or misleading data through formal and informal hearings. A copy of the Act or questions concerning the Family Educational Rights and Privacy Act may be referred to the Assistant Dean of Student Services, 815/835-6305.

Disability
If you have a disability or suspect that you have one and want to request a classroom accommodation, it is your responsibility to contact the Disability Support Office. Reasonable accommodations will be made after verification from the Coordinator of Disability Support located in Room 1F27 in the Student Services Center, or by calling 815/835-6220.
Notification of Recording
All classes at Sauk Valley Community College may be recorded for a variety of reasons to include compliance with the American with Disabilities Act in providing reasonable accommodations to person with disabilities. By enrolling in this course, students hereby consent to recording of classes.

Sexual Misconduct
Our College is committed to fostering a safe, productive learning environment. Title IX and our College Policy prohibits discrimination on the basis of sex.

Sexual misconduct - including harassment, domestic and dating violence, sexual assault, exploitation, and stalking - is prohibited at our College.

Our College encourages anyone experiencing sexual misconduct to talk to someone about what happened, so they can get the support they need and our College can respond appropriately.

If you wish to speak confidentially about an incident of sexual misconduct, please contact one of the confidential resources located in the Student Services Center: Academic Advising, TRIO, or Disability Support Office (DSO).

If you wish to report sexual misconduct or have questions about College policies and procedures regarding sexual misconduct, please contact our College’s Title IX Coordinator, Daniel McCollum (room 3E4, phone 815-835-6256), or Assistant Coordinator, Pamela Medema (in the Student Services Center, phone 815-835-6378).

Our College is legally obligated to investigate all reports of sexual misconduct, and therefore it cannot guarantee the confidentiality of a report, but will consider a request for confidentiality and respect it to the extent possible.

As a professor, I am also legally required to report incidents of sexual misconduct that come to my attention through any source (verbal or written) and thus cannot guarantee confidentiality. I must provide our Title IX coordinator with relevant details such as the names of those individuals involved in the incident.