Syllabus: General Chemistry I Lab The School of Arts & Sciences St. Thomas Aquinas College

<u>Course Description</u>: This is the first half of a two-semester sequence of a course designed to lay a firm foundation for more advanced chemistry, forensic science and other science courses. This course should be taken simultaneously with CHEM 171 (the lecture). You will perform laboratory exercises exploring the following topics: mass relationships, gas laws, heat systems, periodicity, and molecular structure.

<u>Prerequisites:</u> Students must have completed a course at the level of MATH 101 or a higher level course in mathematics.

Required Materials:

- STAC Lab Manual (purchased for \$40) If you do not pay for your lab manual you will FAIL the class.
- Lab Notebook
- Scientific calculator
- Lab coat or apron (available in book store)
- Safety goggles (available in the book store)
- Access to a graphing software program (Excel is sufficient)

Student Evaluation and Grades:

1. Pre-Labs/Note	
2. Post-Labs	50 %
3. Lab Performan	ce 10 %
4. Abstracts	15 %
5. Quizzes	10 %

<u>Pre-Labs</u>: Should be turned in before the start of lab. Late pre-labs will **NOT** be accepted.

Notebooks: Each week before coming to lab, students should read the ENTIRE lab and write the appropriate notebook entry. See the Lab Manual for a description of what to include. Before you leave lab each week you will also be required to make a small entry about what you just complete. Be sure to check in with your instructor before leaving.

<u>**Post – Labs:**</u> Each week there will be an assignment to be completed after the lab. This includes calculations and conclusions from your experiment. Be sure to carry out these calculations carefully and think about what you are analyzing.

Lab Performance: Grades will be based on the following: established rules, lab neatness, class participation, preparedness for lab (proper clothing etc). In some labs you will be graded on how accurate your results are. Careful lab performance is important.

Abstracts: Each week, students will write an abstract describing the previous week's experiment. See the Lab Manual for how to write an abstract. These should be typed and printed out to be handed in.

<u>Quizzes:</u> Each week there will be a short quiz about the lab for the day. If you read the lab before coming to lab, and completed the pre-lab assignment you should be able to answer the quiz questions.

<u>Attendance Policy</u>: Students are expected to be present at every lab period. If you must miss a lab please notify the instructor **BEFORE** the lab period. Failure to contact the instructor will result in a zero for the lab. Only one make up lab will be allowed during the semester.

Plagiarism and Cheating: Trying to present another person's work as your own original work is plagiarism. This is academically dishonest and will be dealt with severely, as will cheating on any quiz. If a student is found cheating on any assignment in this class, you will receive a zero for that assignment/quiz. If a student is found to be cheating a second time, this will result in a failing grade for the semester. The student is referred to the College catalog for more information. Students are permitted to work together as lab partners, but each student should turn in their **OWN** work and fully understand the work they are turning in.

Class Policies:

- Please turn off all cell phones prior to the start off class.
- Students should abide by all safety requirements
- No horse play or dangerous behavior will be tolerated. Students may be asked to leave the lab if they are not behaving properly. This will result in a zero for the day.
- Coats, backpacks, extra books, and other personal items should be stored on the sides/back of the lab. Away from the main work area.
- No food or beverages are allowed in lab. You may keep food or beverages in the hallway outside the door for easy access.

Academic Integrity:

Academic Integrity, a commitment to honesty, fairness, respect, and responsibility, is the foundation of the learning process. All members of the St. Thomas Aquinas College community are held to the highest standards of academic honesty. While we recognize the participatory nature of education, we take academic integrity very seriously, and the College policy on academic dishonesty details consequences that can include dismissal from the College. That policy can be found in both the Student Handbook and the College Catalog.

As a student in this class, you must demonstrate your commitment to academic integrity by submitting work which you have personally completed, representing your best effort and which originates in your own imagination, thought, analysis, or knowledge. When your work requires inclusion of information and substantiation from other sources, you must always ensure that these sources are properly cited using the recommended documentation system.

Academic Disability Statement:

Students requiring accommodations for a documented disability should notify the instructor before the end of the first week of class.

College Policy on Electronic Devices in the Classroom:

Students are not allowed to use any electronic device at any time without the expressed consent of the professor. This policy addresses the use of cell phones, laptop computers, or any other device whose use the professor determines constitutes a distraction to him or to the other students in the class. Students with documented disabilities that require the use of a laptop in class may use them after informing their professor.

When a professor designates a time during which laptop computers may be used, they may only be used at the discretion of the faculty member and in accordance with the mission of the college; visiting sites which are not pertinent to the task at hand is forbidden.

Professors have the latitude to develop specific and reasonable policies to deal with violations of these general policies as they see fit. For more extreme cases of classroom disruption, see the College's Disruptive Student Policy.

Respect and Behavior in the classroom

Respect for everyone in the classroom is required of both students and the instructor. Cell phone use is strictly prohibited because it is disruptive of learning.

STAC Grading Policy:

A = 100 - 95 % A = 94-90 % B = 86-83 % B = 82-80 % $C^{+} = 79-77 \%$ C = 76-73 % $C^{-} = 72-70 \%$ D = 69-65%F = 64-0 %

Lab Schedule:

Date	Lab	Name
Sept 9,10, & 14	1	Intro to Lab, Learning Excel
Sept 16, 17, & 21	2	Accuracy of Liquid Measuring Devices
Sept 23, 24, & 28	3	Avogadro's Number and Moles (a.k.a "Popcorn Lab")
Sept 30, Oct 1, & 5	4	Preparation of Magnesium Oxide
Oct 7, 8, & 19	5	Synthesis of Alum from Scrap Aluminum
Oct 12		No Lab: Columbus Day
Oct 14, 15, & 26	6	Chemical Reactions
Oct 21, 22, & Nov 2	7	Gas Laws
Oct 28, 29, & Nov 9	8	Hess's Law
Nov 4, 5, & 16	9	Analysis of the Silver Group Cations
Nov 11, 12, 23	10	Copper Cycle
Nov 18, 19, & 30	11	Vinegar Titration
Nov 25 & 26		No Lab: Thanksgiving Break
Dec 2, 3, & 7	12	Beer's Law
Dec 9, 10, 14	13	Lewis Structures and Molecular Geometries
Dec 16 & 17		Make Ups