Student learning disabilities documented through the Disability Services Coordinator (Student Center 255, (678) 466-5445, disabilityservices@mail.clayton.edu) will be honored as detailed to the instructor. Please inform the instructor within the first week of the course or as soon as possible.

Course Description:

Number and Title: CHEM 1151L: (CRN 80720), Survey of Chemistry I Laboratory
Credit Hours: 1.0 semester credit hour
Catalog Description: Laboratory accompanying CHEM 1151.

Course Prerequisite:
- CHEM 1151 with a minimum grade of D (can be taken concurrently)

Instructor Information:
Instructor: Dr. Aubrey Dyer
phone: (678) 466-4894
fax: (678) 466-4797
e-mail: aubreydyer@clayton.edu
internet: http://faculty.clayton.edu/adyer3
Office: NBS, Room 165 (before move)/ New Science Building, Room 235C (after move)
Office hours:
Mondays: 10-11am and 1-3:30pm
Tuesdays: 10-11am and 2-3:30pm
Other times by appointment

Class Meetings:
Lab Room and Class Times: NBS Room 178, 1:00pm-2:50pm, Wednesday

Required Materials:
- Safety Goggles
- Scientific Calculator
- Laptop Computer

Lab Manual: The laboratory manual can be found online at the course website: http://www.clayton.edu/chemistry-physics/laboratory_course_websites

The report sheets AND data sheets for each individual lab experiment can be found at the same site.

You are required to supply your own safety glasses for the laboratory. These are available in the campus bookstore but may be purchased elsewhere. Safety glasses MUST be worn in the laboratory at all times. You will not be allowed to complete the lab without safety glasses.

The instructor will deduct points from lab reports for not bringing safety glasses to lab, or not wearing them while in the laboratory at a rate of 5 points per incident.
Evaluation:
Your evaluation in CHEM 1151L will be based upon your laboratory reports for each experiment. The report is comprised of the data sheets, any graphs required, and the worksheets outlined in the lab assignment that week. The report forms must be typed on white paper and be written in Standard English. You will be graded for completeness, correctness, grammar/spelling, and your understanding of the concepts as demonstrated by the questions answered and interpretation of the data.
You must complete the laboratory report sheet and worksheet for each experiment by accessing these forms from the course web page. You may complete the forms directly on the web and print them, or you may download them to your computer and complete them using a word processing program (Word™) and print them to be submitted to the instructor. These forms are not to be handwritten nor emailed. Completed lab reports are due at the beginning of the next laboratory class. Points will be deducted for late laboratory reports as outlined under course policies.

Each lab report is worth 100 points, with 10 reports due for the semester. All reports are weighted equally with each report representing 10% of your final lab grade.

Grading Scale
A 90.0% — 100%
B 80.0% — 89.9%
C 70.0% — 79.9%
D 60.0% — 69.9%
F Less than 59.9%

Mid-term Progress Report:
Due to the relatively small number of laboratory reports that will have been returned by mid-term, mid-term grades may not be reported for this course. Students making unsatisfactory progress will be contacted individually by the instructor before mid-term. If the instructor feels that enough lab reports have been completed by the deadline for mid-term grades, they may issue a mid-term grade report. If issued, the mid-term grade in this course will be issued on or about October 8, reflects only a portion of the entire course grade. Based on this grade, students may choose to withdraw from the course and receive a grade of "W." Students pursuing this option must fill out an official withdrawal form, available in the Office of the Registrar, or withdraw on-line using the Swan by mid-term, which occurs on October 9. Instructions for withdrawing are provided at this link.
The last day to withdraw without academic accountability is Friday, October 9, 2015
**Tentative Lab Schedule:**

The preparation and set-up of the chemistry laboratories is not an easy chore. There are multiples of sections and courses that use the same laboratory. It is critical that you attend the laboratory during your scheduled time period and that you show up on time. We cannot guarantee a make-up.

<table>
<thead>
<tr>
<th>Week of</th>
<th>Laboratory Experiments</th>
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</thead>
<tbody>
<tr>
<td>8/17</td>
<td>Introduction, waiver, safety, Word™ computer lab assigned</td>
</tr>
<tr>
<td>8/24</td>
<td>Computer lab –Bring your computers (with Microsoft Office™ installed) this week</td>
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<tr>
<td></td>
<td><strong>Word™ Assignment Due</strong></td>
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<tr>
<td>8/31</td>
<td>Measurement—First week of laboratory experiments. You must have safety glasses beginning this week.</td>
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<tr>
<td></td>
<td><strong>Excel™ Assignment Due</strong></td>
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<tr>
<td>9/7</td>
<td><em>Labor Day. No Lab this week</em></td>
</tr>
<tr>
<td>9/14</td>
<td>Empirical Formula of Zinc Chloride</td>
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<tr>
<td></td>
<td><strong>Measurement Report Due</strong></td>
</tr>
<tr>
<td>9/21</td>
<td>Flame Test</td>
</tr>
<tr>
<td></td>
<td><strong>Empirical Formula Report Due</strong></td>
</tr>
<tr>
<td>9/28</td>
<td>Spectroscopy of Chromium—Day 1</td>
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<tr>
<td></td>
<td><strong>Flame Text Report Due</strong></td>
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<tr>
<td>10/5</td>
<td>Spectroscopy of Chromium—Day 2</td>
</tr>
<tr>
<td>10/12</td>
<td><em>Fall Break. No Lab this week</em></td>
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<tr>
<td>10/19</td>
<td>Blue Bottle Lab</td>
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<tr>
<td></td>
<td><strong>Spectroscopy Report Due</strong></td>
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<tr>
<td>10/26</td>
<td>Reactions of Copper Lab—Day 1</td>
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<tr>
<td></td>
<td><strong>Blue Bottle Report Due</strong></td>
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<tr>
<td>11/2</td>
<td>Reactions of Copper Lab—Day 2</td>
</tr>
<tr>
<td>11/9</td>
<td>Atmospheric Pressure Lab</td>
</tr>
<tr>
<td></td>
<td><strong>Reactions of Copper Report Due</strong></td>
</tr>
<tr>
<td>11/16</td>
<td>Antacids Lab</td>
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<tr>
<td></td>
<td><strong>Atmospheric Pressure Report Due</strong></td>
</tr>
<tr>
<td>11/23</td>
<td><em>Thanksgiving Week. No lab this week</em></td>
</tr>
<tr>
<td>11/30</td>
<td>Last Day of Lab—Clean-up, Check-out, <strong>Antacids Report Due</strong></td>
</tr>
</tbody>
</table>
Computer Requirement:
Each CSU student is required to have ready access throughout the semester to a notebook computer that meets faculty-approved hardware and software requirements for the student's academic program. Students will sign a statement attesting to such access. For further information on CSU's Official Notebook Computer Policy, please go to http://www.clayton.edu/hub/itpchoice/notebookcomputerpolicy.

Computer Skill Prerequisites: Able to use your computer’s (Windows or MacOS) operating system, able to send and receive e-mail, able to attach and retrieve attached files via email, able to use a Web browser, able to use Microsoft Word™ word processing, able to use Excel™ spread sheet system, including graphing.

In-class Use of Student Notebook Computers: Computers will be required to access course materials and to communicate with your instructor. Student notebook computers will only be used in the lab room once in the semester (computer lab). It is advised that you refrain from bringing your computer and other electronic devices to lab as we are working with chemicals and will not be held responsible for any damage to these devices should you bring them to lab.

Course Webpages:
D2L: Information of interest to students will be posted on the course webpage in GeorgieVIEW Desire2Learn (D2L). You can gain access to Desire2Learn, by signing on to the SWAN portal and selecting: ”D2L” on the top right side. If you experience any difficulties in Desire2Learn, please email or call The HUB at TheHub@mail.clayton.edu or (678) 466-HELP. You will need to provide the date and time of the problem, your SWAN username, the name of the course that you are attempting to access, and your instructor's name.

Program Learning Outcomes:
General education outcomes: The following link provides the Clayton State University Core Curriculum outcomes (see Area D):
http://www.clayton.edu/Portals/5/core_curriculum_outcomes_clayton.pdf

Course learning outcomes: After completing the course, the successful student will:
- Execute the procedure of a textbook laboratory experiment with attention to accuracy, proper procedure and health and safety.
- Be able to collect relevant data and make careful, appropriate observations during the execution of the experiment.
- Be able to interpret the data for the purpose of completing calculations and answering questions on the laboratory report sheet.

Course Policies:
General Policy: Students must abide by policies in the Clayton State University Student Resource Handbook, and the Basic Undergraduate Student Responsibilities.
University Attendance Policy: Students are expected to attend and participate in every class meeting. Instructors establish specific policies relating to absences in their courses and communicate these policies to the students through the course syllabi. Individual instructors, based upon the nature of the course, determine what effect excused and unexcused absences have in determining grades and upon students’ ability to remain enrolled in their courses. The university reserves the right to determine that excessive absences, whether justified or not, are sufficient cause for institutional withdrawals or failing grades.
Course Attendance Policy: Attendance is required for all lab periods. To receive credit for laboratory exercises and reports, you must complete all of the laboratory experiments or make specific arrangements with the instructor. Please note that we are midway through the week and
there remain limited choices for makeup sections. If you miss the lab that week, there are no
guaranteed additional opportunities to make up the lab.

**Missed Work:** Absence on the day of a lab will result in a grade of zero. If you expect to miss
a lab, you must make arrangements with the instructor in advance to attend an earlier lab session.
Your ability to do so is up to the discretion of the instructor for your class and the class you plan
to attend, and is not guaranteed. You must physically complete the laboratory experiment to get
credit. You may not simply obtain the data from another student. Anyone doing this will
receive a zero on the laboratory exercise as this is cheating.

**Tardiness:** Lab will start promptly at 1:00 and end at 2:50. It is expected that you will be
present and ready to start on time. Points will be deducted from your laboratory report for that
week for each minute you are late. Each laboratory period will begin with a short introduction
lecture where important concepts and laboratory techniques are discussed. If you miss this
introduction, it is your responsibility to obtain the necessary information. Excessive tardiness
may result in your removal from the laboratory. In order to use your time effectively, I advise
that you read the laboratory assignment before coming to lab, familiarize yourself with the
equipment, materials, and techniques used and prepare your laboratory data sheets accordingly.

**Late Work:** Laboratory reports (work sheets and data sheets) are due at the beginning of class.
After 1:00pm, the reports are considered late and an immediate 5 points will be deducted from
the report grade. For each 24 hour period after that, an additional 5 points will be deducted. For
example, you turn in your report on Friday at 2pm, you automatically lose 10 points. Do NOT
email reports to be turned in. I will not accept emailed reports.

**Academic Dishonesty:** I take academic integrity very seriously. Any type of activity that is
considered dishonest by reasonable standards may constitute academic misconduct. The most
common forms of academic misconduct are cheating and plagiarism. Copying laboratory results
for work you did not do is considered cheating. Turning in a laboratory report that you did not
write is also cheating. All instances of academic dishonesty will result in a grade of zero for the
work involved, at a minimum, and can result in expulsion from the institution. All instances of
academic dishonesty will be reported to the Office of Community Standards. Judicial
procedures are described in the Student Resource Handbook (Procedures for Adjudicating
Alleged Academic Conduct Infractions beginning on page 16).

**Risk:** Participation in laboratory activities involves an inherent risk of injury. In the event of injury, the
student should immediately inform the instructor who will contact the Campus Public Safety Officer.
The officer will file an accident report and administer first aid or contact appropriate medical help.

**Disruption of the Learning Environment:** Behavior which disrupts the teaching–learning
process during class activities will not be tolerated. While a variety of behaviors can be
disruptive in a classroom setting, more serious examples include belligerent, abusive, profane,
and/or threatening behavior. A student who fails to respond to reasonable faculty direction
regarding classroom behavior and/or behavior while participating in classroom activities may be
dismissed from class. A student who is dismissed is entitled to due process and will be afforded
such rights as soon as possible following dismissal. If found in violation, a student may be
administratively withdrawn and may receive a grade of WF.

A more detailed description of examples of disruptive behavior and appeal procedures is
provided at: [http://www.clayton.edu/Portals/5/DisruptiveClassroomBehavior.pdf](http://www.clayton.edu/Portals/5/DisruptiveClassroomBehavior.pdf)

**Laboratory Policies:**

1. Arrive to lab on time and stay until the exercise is complete.
2. No children or visitors are allowed in the laboratory
3. Turn off cell phones, pagers, music players, and other personal electronic devices. Failure to
do so will result in the student:
   a. having points deducted from his/her grade
   b. being asked to leave the room and being reported for disruptive behavior.
4. No eating, smoking or drinking in the laboratory. No food is allowed in the laboratory. This includes drink bottles.
5. Be aware of all laboratory policies and procedures and abide by the safety rules. Failure to do so may result in your removal from the laboratory.
6. Wear your safety glasses at all times in the laboratory. The instructor may deduct points from lab reports for failure to wear safety glasses.
7. Keep a clean and tidy work area. Report any chemical spills to the instructor.
8. Clothing above knee level and open-toed shoes are not to be worn in the lab. Students will not be allowed in the lab and will lose all points for lab that day for not wearing the appropriate clothing or shoes to the lab.

**Group Work:** We will normally work in small groups in the laboratory. It is each individual's responsibility to insure that everyone in the group participates in all aspects of the experiment. You are responsible for cleaning all equipment used and keeping the lab neat and clean. Points may be deducted for failure to wear safety glasses while physically in the laboratory, for messy labs, late reports, horseplay in lab, etc., at the discretion of the instructor.

*Last update: July 17, 2015*