



**TENTATIVE—SUBJECT TO CHANGE**

**CHEM 1151 – Survey of Inorganic Chemistry Lab**

**COURSE SYLLABUS**

**Spring Semester 2021 (202114)**

**COURSE INFORMATION**

Credit Hours/Minutes: 1/2250

Campus/Class Location: Vidalia

Class Meets: In person for 15 weeks

Course Reference Number (CRN): 20004

**INSTRUCTOR CONTACT INFORMATION**

Instructor Name: Professor Shirley Holman

Office Location: no office on campus

Office Hours: By Appointment

Email Address: [sholman@southeasterntech.edu](mailto:sholman@southeasterntech.edu)

Tutoring Hours: Tuesdays 1:30pm-3:30pm

**SOUTHEASTERN TECHNICAL COLLEGE'S (STC) CATALOG AND HANDBOOK**

Students are responsible for all policies and procedures and all other information included in Southeastern Technical College's [Catalog and Handbook](http://www.southeasterntech.edu/student-affairs/catalog-handbook.php) (<http://www.southeasterntech.edu/student-affairs/catalog-handbook.php>).

**REQUIRED TEXT**

EScience Lab Kit - Introductory Chemistry Version 4 (2<sup>nd</sup> edition)

**REQUIRED SUPPLIES & SOFTWARE**

Scientific Calculator

Ruler

Bound Notebook

Black ink pen

Colored Pencils

Graph paper

EScience Lab Kit 4604

Computer

Internet access

## **COURSE DESCRIPTION**

Selected laboratory experiments paralleling the topics in CHEM 1151. The lab exercises for this course include units of measurements, structure of matter, chemical bonding, chemical reactions, gas laws, liquid mixtures, acids and bases, salts and buffers, and nuclear chemistry.

## **MAJOR COURSE COMPETENCIES**

1) Laboratory Safety; 2) Units of Measurements; 3) Structure of Matter; 4) Chemical Bonding; 5) Chemical Reactions; 6) Gas Laws; 7) Liquid Mixtures; 8) Acids and Bases; 9) Salts and Buffers; 10) Nuclear Chemistry

## **PREREQUISITE(S)**

None

## **COURSE OUTLINE**

1. Laboratory Safety
2. Units of Measurement
3. Structure of Matter
4. Chemical Bonding
5. Chemical Reactions
6. Gas Laws
7. Liquid Mixtures
8. Acids and Bases
9. Salts and Buffers
10. Nuclear Chemistry

## **GENERAL EDUCATION CORE COMPETENCIES**

STC has identified the following general education core competencies that graduates will attain:

1. The ability to utilize standard written English.
2. The ability to solve practical mathematical problems.
3. The ability to read, analyze, and interpret information.

## **STUDENT REQUIREMENTS (ONLINE)**

This course includes the completion of lab experiments and reports paralleling the topics in CHEM 1151. The lab exercises for this course include units of measurement, structure of matter, chemical bonding, chemical reactions, gas laws, liquid mixtures, acids and bases, salts and buffers, and nuclear chemistry.

You must purchase an ***EScience Lab Kit – KIT4604*** from the bookstore. The experiments included in the lab kits use safe and green chemicals, which means there are minimal personal and environmental risks. Topics and material required to fully understand the lab will be covered in the lecture and will assist in properly answering and completing the lab questions and reports.

## **LAB REPORTS**

Students must purchase an *EScience Lab Kit - Introductory Chemistry Version 4 (2<sup>nd</sup> edition)* from the bookstore. Students must conduct each experiment and submit the completed lab reports by the specified due dates.

## **LAB NOTEBOOKS**

Lab notebooks are to be submitted by specified due dates. Late submissions will not be accepted.

## **COVID-19 MASK REQUIREMENT**

Masks or face coverings must be worn at all times while on the campus of Southeastern Technical College. This measure is being implemented to reduce COVID-19 related health risks for everyone engaged in the

educational process. Masks or face coverings must be worn over the nose and mouth, in accordance with the Centers for Disease Control and Prevention (CDC). A student's refusal to wear a mask or face covering will be considered a classroom disruption and the student may be asked to leave campus and/or receive further discipline.

### **COVID-19 SIGNS AND SYMPTOMS**

We encourage individuals to monitor for the signs and symptoms of COVID-19 prior to coming on campus.

If you have experienced the symptoms listed below or have a body temperature 100.4°F or higher, we encourage you to self-quarantine at home and contact a primary care physician's office, local urgent care facility, or health department for further direction. Please notify your instructor(s) by email and do not come on campus for any reason.

<b>COVID-19 Key Symptoms</b>
Fever or felt feverish
Cough: new or worsening, not attributed to another health condition
Shortness of breath, not attributed to another health condition
New loss of taste or smell
Chills; Repeated shaking with chills
Sore throat, not attributed to another health condition
Muscle pain, not attributed to another health condition or exercise
Headache, not attributed to another health condition
Diarrhea (unless due to known cause)
<b>In the past 14 days, if you:</b>
Have had close contact with or are caring for an individual diagnosed with COVID-19 at home (not in healthcare setting), please do not come on campus and contact your instructor (s).

### **COVID-19 SELF-REPORTING REQUIREMENT**

Students, who test positive for COVID-19 or who have been exposed to a COVID-19 positive person, are required to self-report using the [COVID 19 Health Reporting Form](#). Report all positive cases of COVID-19 to your instructor and [Stephannie Waters](#), Exposure Control Coordinator, [swaters@southeasterntech.edu](mailto:swaters@southeasterntech.edu), 912-538-3195.

### **ATTENDANCE GUIDELINES**

Class attendance is a very important aspect of a student's success. Being absent from class prevents students from receiving the full benefit of a course and interrupts the learning process. Southeastern Technical College considers both tardiness and leaving early as types of absenteeism. Responsibility for class attendance rests with the student. Regular and punctual attendance at all scheduled classes is required for student success. Students will be expected to complete all work required by the instructor as described in the individual course syllabus.

Instructors have the right to give unannounced quizzes/assignments. Students who miss an unannounced quiz or assignment will receive a grade of 0. Students who stop attending class, but do not formally withdraw, may receive a grade of "F" (Failing 0-59) and face financial aid repercussions in upcoming semesters. Instructors are responsible for determining whether missed work may be made up and the content and dates for makeup work is at the discretion of the instructor.

Attendance is counted from the first scheduled class meeting of each semester. To receive credit for a course a student must attend at least 90% of the scheduled instructional time. All work missed due to tardiness or absences must be made up at the convenience of the instructor. Any student attending less than the required

scheduled instructional time (90%) may be dropped from the course as stated below in the Withdrawal Procedure.

### **STUDENTS WITH DISABILITIES**

Students with disabilities who believe that they may need accommodations in this class based on the impact of a disability are encouraged to contact the appropriate campus coordinator to request services.

Swainsboro Campus: [Macy Gay \(mgay@southeasterntech.edu\)](mailto:mgay@southeasterntech.edu), 478-289-2274, Building 1, Room 1210.

Vidalia Campus: [Helen Thomas \(hthomas@southeasterntech.edu\)](mailto:hthomas@southeasterntech.edu), 912-538-3126, Building A, Room 165.

### **SPECIFIC ABSENCES**

Provisions for Instructional Time missed because of documented absences due to jury duty, military duty, court duty, or required job training will be made at the discretion of the instructor.

### **PREGNANCY**

Southeastern Technical College does not discriminate on the basis of pregnancy. However, we can offer accommodations to students who are pregnant that need special consideration to successfully complete the course. If you think you will need accommodations due to pregnancy, please make arrangements with the appropriate campus coordinator.

Swainsboro Campus: [Macy Gay \(mgay@southeasterntech.edu\)](mailto:mgay@southeasterntech.edu), 478-289-2274, Building 1, Room 1210.

Vidalia Campus: [Helen Thomas \(hthomas@southeasterntech.edu\)](mailto:hthomas@southeasterntech.edu), 912-538-3126, Building A, Room 165.

It is strongly encouraged that requests for consideration be made **PRIOR** to delivery and early enough in the pregnancy to ensure that all the required documentation is secured before the absence occurs. Requests made after delivery MAY NOT be accommodated. The coordinator will contact your instructor to discuss accommodations when all required documentation has been received. The instructor will then discuss a plan with you to make up missed assignments.

### **WITHDRAWAL PROCEDURE**

Students wishing to officially withdraw from a course(s) or all courses after the drop/add period and prior to the 65% point of the term in which student is enrolled (date will be posted on the school calendar) must speak with a Career Counselor in Student Affairs and complete a Student Withdrawal Form. A grade of "W" (Withdrawn) is assigned for the course(s) when the student completes the withdrawal form. Important – Student-initiated withdrawals are not allowed after the 65% point. After the 65% point of the term in which the student is enrolled, the student has earned the right to a letter grade and will receive a grade for the course. Please note: Abandoning a course(s) instead of following official withdrawal procedures may result in a grade of "F" (Failing 0-59) being assigned. Informing your instructor that you will not return to his/her course, does not satisfy the approved withdrawal procedure outlined above. There is no refund for partial reduction of hours. Withdrawals may affect students' eligibility for financial aid for the current semester and in the future, so a student must also speak with a representative of the Financial Aid Office to determine any financial penalties that may be assessed due to the withdrawal. A grade of "W" will count in attempted hour calculations for the purpose of Financial Aid.

### **MAKEUP GUIDELINES (TESTS, QUIZZES, HOMEWORK, PROJECTS, ETC.)**

No late homework assignments will be accepted. Students with excused absences that need to make up quizzes/tests can do so on Tuesday after the missed formal assessment by appointment only. Any missed quizzes or test will be graded as a 0.

### **ACADEMIC DISHONESTY POLICY**

The Southeastern Technical College Academic Dishonesty Policy states that all forms of academic dishonesty, including but not limited to cheating on tests, plagiarism, collusion, and falsification of information, will call for

discipline. The policy can also be found in the Southeastern Technical College Catalog and Handbook.

## **PROCEDURE FOR ACADEMIC MISCONDUCT**

The procedure for dealing with academic misconduct and dishonesty is as follows:

### **1. First Offense**

Student will be assigned a grade of "0" for the test or assignment. Instructor keeps a record in course/program files and notes as first offense. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus. The Registrar will input the incident into Banner for tracking purposes.

### **2. Second Offense**

Student is given a grade of "WF" (Withdrawn Failing) for the course in which offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of second offense. The Registrar will input the incident into Banner for tracking purposes.

### **3. Third Offense**

Student is given a grade of "WF" for the course in which the offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of third offense. The Vice President for Student Affairs, or designee, will notify the student of suspension from college for a specified period of time. The Registrar will input the incident into Banner for tracking purposes.

## **STATEMENT OF NON-DISCRIMINATION**

The Technical College System of Georgia (TCSG) and its constituent Technical Colleges do not discriminate on the basis of race, color, creed, national or ethnic origin, gender, religion, disability, age, political affiliation or belief, genetic information, disabled veteran, veteran of the Vietnam Era, spouse of military member, or citizenship status (except in those special circumstances permitted or mandated by law). This nondiscrimination policy encompasses the operation of all technical college-administered programs, federally financed programs, educational programs and activities involving admissions, scholarships and loans, student life, and athletics. It also applies to the recruitment and employment of personnel and contracting for goods and services.

All work and campus environments shall be free from unlawful forms of discrimination, harassment and retaliation as outlined under Title IX of the Educational Amendments of 1972, Title VI and Title VII of the Civil Rights Act of 1964, as amended, the Age Discrimination in Employment Act of 1967, as amended, Executive Order 11246, as amended, the Vietnam Era Veterans Readjustment Act of 1974, as amended, Section 504 of the Rehabilitation Act of 1973, as amended, the Americans With Disabilities Act of 1990, as amended, the Equal Pay Act, Lilly Ledbetter Fair Pay Act of 2009, the Georgia Fair Employment Act of 1978, as amended, the Immigration Reform and Control Act of 1986, the Genetic Information Nondiscrimination Act of 2008, the Workforce Investment Act of 1998 and other related mandates under TCSG Policy, federal or state statutes.

The Technical College System and Technical Colleges shall promote the realization of equal opportunity through a positive continuing program of specific practices designed to ensure the full realization of equal opportunity.

The following individuals have been designated to handle inquiries regarding the nondiscrimination policies:

<b>American With Disabilities Act (ADA)/Section 504 - Equity- Title IX (Students) – Office of Civil Rights (OCR) Compliance Officer</b>	<b>Title VI - Title IX (Employees) – Equal Employment Opportunity Commission (EEOC) Officer</b>
Helen Thomas, Special Needs Specialist	Lanie Jonas, Director of Human Resources

<b>American With Disabilities Act (ADA)/Section 504 - Equity- Title IX (Students) – Office of Civil Rights (OCR) Compliance Officer</b>	<b>Title VI - Title IX (Employees) – Equal Employment Opportunity Commission (EEOC) Officer</b>
Vidalia Campus 3001 East 1 <sup>st</sup> Street, Vidalia Office 165 Phone: 912-538-3126 Email: <a href="mailto:hthomas@southeasterntech.edu">Helen Thomas</a> <a href="mailto:hthomas@southeasterntech.edu">hthomas@southeasterntech.edu</a>	Vidalia Campus 3001 East 1 <sup>st</sup> Street, Vidalia Office 138B Phone: 912-538-3230 Email: <a href="mailto:ljonas@southeasterntech.edu">Lanie Jonas</a> <a href="mailto:ljonas@southeasterntech.edu">ljonas@southeasterntech.edu</a>

### ACCESSIBILITY STATEMENT

Southeastern Technical College is committed to making course content accessible to individuals to comply with the requirements of Section 508 of the Rehabilitation Act of Americans with Disabilities Act (ADA). If you find a problem that prevents access, please contact the course instructor.

### GRIEVANCE PROCEDURES

Grievance procedures can be found in the Catalog and Handbook located on Southeastern Technical College’s website.

### ACCESS TO TECHNOLOGY

Students can now access Blackboard, Remote Lab Access, Student Email, Library Databases (Galileo), and BannerWeb via the mySTC portal or by clicking the Current Students link on the [Southeastern Technical College \(STC\) Website \(www.southeasterntech.edu\)](http://www.southeasterntech.edu).

### TECHNICAL COLLEGE SYSTEM OF GEORGIA (TCSG) GUARANTEE/WARRANTY STATEMENT

*The Technical College System of Georgia guarantees employers that graduates of State Technical Colleges shall possess skills and knowledge as prescribed by State Curriculum Standards. Should any graduate employee within two years of graduation be deemed lacking in said skills, that student shall be retrained in any State Technical College at no charge for instructional costs to either the student or the employer.*

### GRADING POLICY

Course Grade	Percentage
Lab Reports	50%
Lab Notebook	50%

### GRADING SCALE

Letter Grade	Range
A	90-100
B	80-89
C	70-79
D	60-69
F	0-59

# CHEM 1151 L – Survey of Inorganic Chemistry Lab

## Fall Semester 2020 Lesson Plan

Date/Week	Content	Comp Area	Gen Ed Comp
Jan. 14	Lab 1: Introduction and Laboratory Safety Procedures	1, 2	a, b, c
Jan. 21	Lab 2: Thinking Like a Chemist: The Scientific Method	1, 2	a, b, c
Jan. 28	Lab 3: Data Analysis and Graphing	1, 2	a, b, c
Feb. 4	Lab 6: Electron Configuration	1, 3	a, b, c
Feb. 18	Lab 4: Periodic Trends in Atomic Properties	1, 3	a, b, c
Feb. 25	Virtual Lab #1: Isotopes and Atomic Mass <a href="https://phet.colorado.edu/sims/html/isotopes-and-atomic-mass/latest/isotopes-and-atomic-mass_en.html">https://phet.colorado.edu/sims/html/isotopes-and-atomic-mass/latest/isotopes-and-atomic-mass_en.html</a>	3	a, b, c
March 4	Virtual Lab #2: Radioactivity <a href="http://www.glencoe.com/sites/common_assets/science/virtual_labs/E18/E18.html">http://www.glencoe.com/sites/common_assets/science/virtual_labs/E18/E18.html</a>	10	a, b, c
March 18	Lab 7: Molecular Geometry: The VSEPR Model	1, 2, 4	a, b, c
March 25	Lab 5: Molar Mass	1, 2, 4	a, b, c
April 1	Lab 8: Discovering the Five Types of Chemical Reactions	1, 2, 5	a, b, c
April 8	Virtual Lab #3: Balancing Chemical Reactions <a href="https://phet.colorado.edu/sims/html/balancing-chemical-equations/latest/balancing-chemical-equations_en.html">https://phet.colorado.edu/sims/html/balancing-chemical-equations/latest/balancing-chemical-equations_en.html</a>	5	a, b, c
April 15	Lab 10: The Nature of Acids and Bases: Exploring the pH Scale	1, 7, 8, 9	a, b, c
April 22	Lab 9: Using the Ideal Gas Law	1, 2, 6	a, b, c

Order	Competency Area: 1 Description: Laboratory Safety
1	Discuss and apply laboratory exercises encompassing the appropriate practice of laboratory precautions and laboratory safety.

Order	Competency Area: 2 Description: Units of Measurement
1	Perform and apply laboratory exercises encompassing units of measurement.

<b>Order</b>	<b>Competency Area: 3</b> <b>Description: Structure of Matter</b>
1	Perform and apply laboratory exercises encompassing structure of matter.
<b>Order</b>	<b>Competency Area: 4</b> <b>Description: Chemical Bonding</b>
1	Perform and apply laboratory exercises encompassing chemical bonding.
<b>Order</b>	<b>Competency Area: 5</b> <b>Description: Chemical Reactions</b>
1	Perform and apply laboratory exercises encompassing chemical reactions.
<b>Order</b>	<b>Competency Area: 6</b> <b>Description: Gas Laws</b>
1	Perform and apply laboratory exercises encompassing gas laws.
<b>Order</b>	<b>Competency Area: 7</b> <b>Description: Liquid Mixtures</b>
1	Perform and apply laboratory exercises encompassing liquid mixtures.
<b>Order</b>	<b>Competency Area: 8</b> <b>Description: Acids and Bases</b>
1	Perform and apply laboratory exercises encompassing acids and bases.
<b>Order</b>	<b>Competency Area: 9</b> <b>Description: Salts and Buffers</b>
1	Perform and apply laboratory exercises encompassing salts and buffers.
<b>Order</b>	<b>Competency Area: 10</b> <b>Description: Nuclear Chemistry</b>
1	Perform and apply laboratory exercises encompassing nuclear chemistry.

### General Core Educational Competencies

- a) The ability to utilize standard written English.
- b) The ability to solve practical mathematical problems.
- c) The ability to read, analyze, and interpret information.