



**CLARKSTON CAMPUS  
CHEMISTRY 1151 - SURVEY OF  
CHEMISTRY I**

**Semester: Fall 2019**

**[Dr. Maher Atteya, Professor of Chemistry](#)**

**CRN#/Section: CHEM 1151- 009 (CRN # 85493)**

**Lecture Room: CD - 2190**

**Day/Time of Lecture: MW: 8:30 a.m. – 9:45 a.m.**

**Office Phone No.: [678-891-3350](tel:678-891-3350)**

**Office: CC - 1122**

**Office Hours: Monday: 10:00 a.m. – 11:30 a.m.**

**Tuesday: 1:00 p.m. – 3:00 p.m.**

**Wednesday: 10:00 a.m. – 11:30 a.m.**

**Thursday: 1:00 p.m. – 3:00 p.m.**

**Friday: By Appointment Only**

**Saturday: 12 – 1 p.m.**

**Saturday & Sunday: 8:30 p.m. – 10 p.m. Virtual Hours  
online classes**

**E-mail: [matteva@gsu.edu](mailto:matteva@gsu.edu) (public)**

**This syllabus:**

- 1. "The course syllabus provides a general plan for the course; deviations may be necessary."**
- 2. "Your constructive assessment of this course plays an indispensable role in shaping education at Georgia State. Upon completing the course, please take the time to fill out the online course evaluation."**
- 3. "Students who wish to request accommodation for a disability may do so by registering with the Office of Disability Services. Students may only be accommodated upon issuance by the Office of Disability Services of a signed Accommodation Plan and are responsible for providing a copy of that plan to instructors of all classes in which accommodations are sought."**

**SYLLABUS CONFIRMATION**

**Please confirm receiving and reading this syllabus by taking the Syllabus**

**Confirmation Quiz** posted on iCollege.

#### **CO-REQUISITE**

Chemistry 1151 Lab

#### **TEXT**

Georgia State University – Perimeter College **eText of Survey of Chemistry** by Dr. Atteya, Dr. Poteat and Dr. Dutta.

The Link to this eText book is given below:

<https://chemistrylearningbydoing.org/>

Navigation and Registration to this eText Book is given in iCollege Announcements Section

#### **RESOURCE**

A scientific calculator is strongly recommended. Calculators may not be shared during an exam and it is the student's responsibility to bring one to the examination.

#### **PURPOSE**

This course is intended for students in physical education, business, humanities, social sciences, and allied health (Nursing or Dental Hygiene) planning to pursue baccalaureate degrees. The primary topics covered are measurements, nomenclature, atomic bonding, and states of matter, solutions, equilibria, acids, bases, and pH. This course lays the foundation for understanding of biochemical processes.

#### **GSU COURSE SYLLABUS POLICY**

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2. "Your constructive assessment of this course plays an indispensable role in shaping education at Georgia State. Upon completing the course, please take the time to fill out the online course evaluation."

3. "Students who wish to request accommodation for a disability may do so by registering with the Office of Disability Services. Students may only be accommodated upon issuance by the Office of Disability Services of a signed Accommodation Plan and are responsible for providing a copy of that plan to instructors of all classes in which accommodations are sought."

#### **WITHDRAWAL POLICY**

Please refer to the Withdrawal Policy at the links below:

GSU Withdrawal Policy Weblink:

<https://registrar.gsu.edu/registration/withdrawals/>

2019-2020 Associate Level Undergraduate Catalog – Withdrawals:

<https://catalog.gsu.edu/associate20192020/university-academic-regulations/#revisionof-class-schedules-add-drop-withdraw>

#### **GENERAL EDUCATIONAL OUTCOMES**

This course addresses the general education outcome relating to communications as follows:

1. Students develop their reading comprehension skills by reading the text and handout materials.
2. Students develop their listening skills through lecture and small group problem solving. Lecture material is presented that is not included in the text or handout material and is included as part of the exams or tests.
3. Students develop their reading and writing skills through the use of problems and activities developed specifically to enhance their understanding of certain chemistry principles. Students provide written or oral solutions to these problems in both individual and group and group format. They also deal with short-answer type questions on course exams.

This course addresses the general education outcome relating to demonstrating effective individual and group problem solving and critical thinking skills in a variety of situations as follows:

1. Students learn individual and group problem solving and critical thinking skills by doing problems both in classroom and at home.
2. Critical thinking skills are encouraged in many ways, by requesting student response to questions asked during the lecture.

This course addresses the general education outcome relating to recognizing

**and applying scientific inquiry in variety of settings as:**

- 1. Students apply the scientific method in the set-up and solution of the problems designed to illustrate the chemical principle being taught.**
- 2. Students use models that explain the basic scientific phenomenon and relate it to everyday situation.**
- 3. Students use conceptual and physical models to explore theory and relate it to preexisting concepts.**

## **EXPECTED EDUCATIONAL RESULTS**

Upon successful completion of this course, the student should be able to:

1. Use the metric units and appropriate prefixes for mass, length, volume, temperature, density, specific gravity and calories, and convert between one unit and another, including English units.
2. Describe the subatomic particle composition of an atom and interpret atomic number and mass number, including isotopes; describe the electron distribution in the orbitals of an atom.
3. Use the periodic table as a tool to predict trends in chemical behavior, such as atomic radius, ionization energy, bonding.
4. For any given atom or molecule/ionic unit:  
Predict the bond type  
Draw Lewis dot structure  
Determine the number of bonds formed by hydrogen and the row two elements  
Determine the polarity and geometry of the molecules using VSEPR theory  
Determine the relationship between polarity and physical properties of a Compound

Write the formula from the name of a compound and vice versa

5. For chemical reactions:  
Balance chemical equations  
Solve simple Stoichiometry problems  
Identify energy changes that accompany a reaction  
Classify types of chemical reactions
6. Use Kinetic Molecular Theory to explain disruptive forces (kinetic energy) and cohesive forces (intermolecular forces) of molecules/particles in relation to the three states of matter, with major emphasis on the gaseous state; state the molecular properties of solids, liquids and gases, and perform calculations using the Ideal Gas Law and Dalton's Law of Partial Pressures.
7. Describe solutions and colloids in qualitative terms and perform calculations related to concentration, dilution and colligative properties.
8. State factors affecting rates of chemical reactions, interpret energy diagrams, use collision theory to explain rates of reactions, write and interpret the equilibrium constant expression for a given chemical reaction, use Le Chatelier's Principle to predict shifts in equilibrium.
9. For acids, bases and salts:

**Compare and contrast properties and definitions**

**Given the hydronium ion or hydroxide concentration of a solution, calculate pH and vice-versa**

**State the role of buffers and their mechanism in maintaining pH in body fluids**

**Write the conjugate of a given acid or base, and relate acid or base strength to the Strength of its conjugate**

**Calculate pKa and relate it to the strength of an acid**

**Perform calculations on an acid-base titration**

**10. State the different types of radiation and describe how radiation is harmful to living tissue; describe the use of radioactive isotopes in medicine.**

## **ATTENDANCE**

**Students who never attend a class by the end of the first two weeks of the term will be reported for non-attendance.**

**Student-initiated: Any student who withdraws from the lecture must also withdraw from the lab or vice versa. A grade of "W" is given when the withdrawal is processed before the midpoint of the quarter. After the midpoint a grade of "WF" is assigned. It is the responsibility of the student to withdraw from the laboratory class after 2 absences. Instructor can no longer withdraw students from the class. Students' academic success is the major priority of the college. Because regular participation enhances the learning process, students are expected to adhere to the attendance policy set forth by the college and individual faculty members.**

**Differences in content and teaching styles exist among courses which can impact students' learning. Therefore, students are strongly encouraged to attend all classes. Students are accountable for assignments and material covered during an absence.**

## **CLASS POLICIES**

1. The student is responsible for all material covered and all announcements made in class. Absence from class does not relieve the student of these responsibilities.

2. Students who never attend a class by the end of the first two weeks of the term will be reported for non-attendance to the registrar and may affect your financial aid.

Students' academic success is the major priority of the college. Because regular participation enhances the learning process, students are expected to adhere to the attendance policy set forth by the college and individual faculty members.

Differences in content and teaching styles exist among courses, which can impact students' learning. Therefore, students are strongly encouraged to attend all classes. Students are accountable for assignments and material covered during an absence.

3. No smoking, eating, or drinking is permitted in the classroom.

4. No make-up exam will be given unless the student can show proof of an unforeseen and unavoidable calamity (Hospital records, police reports, or court summons, and other emergencies). **A grade of "F" will be given to the student who does NOT take the final exam without any documented excuse.**

5. Cheating cannot be tolerated and will result in a grade of zero on the test or exam involved.

6. Students are encouraged to do the problems at the end of each chapter. No home work will be collected; however the quizzes and the exams will be based on these problems at the end of each chapter.

1. Students in lecture classes are permitted to utilize tape recorders as an aid to note taking. This privilege is subject to the following constraints and conditions:

- a. It is understood that such recordings are to be utilized only for the student's personal use as a study supplement.
- b. Recorders are not to be operated in playback mode or otherwise operated in a manner such as to cause a disruption to the class.
- c. Recorders must be battery operated from the student's chair or desk (not placed on the instructor's desk)

Violation of any of the above conditions may result in revocation of this privilege.

Students may NOT bring their children to class with them. Under no circumstances will college personnel be responsible for supervising children of students while the parent is in class. Parents of unsupervised children will be asked to leave the campus.

Cell phones must be muted in the classroom.

## GRADES

Grades breakdown	Grade Scale
9 Quizzes (taken online using the eText website)	60%
Online Assignments: Mastering Chemistry (taken online)	15%
Final Exam (on Clarkston Campus)	25 %

Alphabets Grades Distribution	% Grade Scale
A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	Below 60%

## GRADE CALCULATION

Please use the excel file called Grade Book found in the Syllabus folder of this class homepage to calculate your grade up to prior the final exam.

Taking the Final Exam is mandatory. Failure to take the final exam will lead to a grade of F. No Exception.

Final Exam will be ACS for the first 55 minutes, then the rest of the 2 ½ hours of the final exam another homemade final exam will be given for the rest of the time period. ACS final exam and homemade final exam will be averaged.

## MAKE UP POLICY

There is no Make Up for any quiz or exam or final exam.



[www.usg.edu/hb280](http://www.usg.edu/hb280)

The Campus Carry legislation allows anyone properly licensed in the state of Georgia to carry a handgun in a concealed manner on university property with noted exceptions. Information about the law can be found at [safety.gsu.edu/campus-carry](http://safety.gsu.edu/campus-carry). It is the responsibility of the license holder to know the law. Failure to do so may result in a misdemeanor charge and may violate the Georgia State Student Code of Conduct."

## Campus Carry - Safety and Security

[safety.gsu.edu](http://safety.gsu.edu)

Information Sessions. The university is holding a series of information sessions on the "campus carry" law. University Attorney Kerry Heyward and Georgia State ...

**Schedule:**

**Please read the information about the chapters and their organization in iCollege.**

**9 Quizzes are taken in class at Clarkston Campus**

**Final Exam: ACS Standard Exam – College wide On Campus in the first 55 minutes, then the rest of time, the students will take second final exam which is not ACS and both ACS and homemade final exams will be averaged. Both final Exams can be taken within 2 ½ hours.**

## **DISCLAIMER**

***The schedule is subjected to a change at the discretion of the instructor.***

## **ACADEMIC HONESTY POLICY**

**GSU's Academic Honesty Policy can be found at the following link:**

<http://deanofstudents.gsu.edu/faculty-staff-resources/academic-honesty/>

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## **Policy on Academic Honesty - Dean of Students**

[deanofstudents.gsu.edu](http://deanofstudents.gsu.edu)

**As members of the academic community, students are expected to recognize and uphold standards of intellectual and academic integrity. The Policy on Academic Honesty ...**

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**And the actual policy in PDF format is given here:**

<http://codeofconduct.gsu.edu/files/2013/03/2014-2015-Section-II-Academic-Conduct-Student-Code-of-Conduct.pdf>

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[codeofconduct.gsu.edu](http://codeofconduct.gsu.edu)

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**Cheating includes any attempt to defraud, deceive, or mislead the instructor in arriving at honest grade assessment.**

**Plagiarism is a form of cheating that involves presenting, as one's own the ideas or work of another.**

**Academic Dishonesty Procedures have been established by GPC to insure due process in case of cheating or plagiarism.**

**A copy of these procedures can be found in the Student Handbook.**

**Cheating of any kind may result in a penalty ranging from a grade of zero for the work in question to a grade of F in the course and will be referred to the College Court for assignment of penalty, which may include suspension from the College. Referral to the college court is required whether the student admits or denies the violation.**

**The following are examples of cheating. This is not an exhaustive list.**

**A. On a test or a quiz:**

- 1. Looking or copying from another student's work.**
- 2. Allowing another student to look or copy your work.**
- 3. Exchanging information with another student.**
- 4. Speaking or whispering. (You may speak to the instructor)**
- 5. Opening textbook or notebook.**
- 6. Looking at notes.**

**B. On Homework or out-of-class assignment:**

- 1. Copying work or answers from another student.**
- 2. Copying work or answers from a book.**
- 3. Having another person to work for you.**
- 4. Allowing another student to use your work as his or her own.**

**C. For late work or tests:**

**Providing false information or documents in order to be allowed to makeup a missed test, quiz, or homework.**

## **TOBACCO POLICY**

**Tobacco and Smoke-Free Campus Policy: Effective October 1, 2014, Georgia Perimeter prohibits the use of tobacco products on any property owned, leased, or controlled by GPC. All faculty, staff, students, visitors, vendors, contractors, and all others are prohibited from using any tobacco products while on GPC property. "Tobacco Products" is defined as cigarettes, pipes, cigars, all forms of smokeless tobacco, clove cigarettes and other smoking devices that use tobacco such as hookahs or simulate the use of tobacco such as electronic cigarettes. Violations of the smoking policy will be handled under the GPC Student Code of Conduct.**

## **AMERICANS WITH DISABILITIES ACT STATEMENT**

**If you are a student who is disabled as defined under the American with disabilities Act and require assistance or support services, please seek assistance through the Center for Disability Services. A CDS counselor will coordinate those services.**

## **CENTER FOR DISABILITY SERVICES "CDS"**

**Students with a documented disability who require support services are encouraged to contact the counselors at the Center for Disability Services to determine whether they qualify for support services. (Ex. Tutors, interpreters, note-takers, and classroom modifications).**

## **EQUAL OPPORTUNITY STATEMENT**

**No person shall, on grounds of race, color, sex, religion, creed, national origin, age or disability, be excluded from employment or participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program or activity conducted by GSU - Perimeter College.**

**GSU - Perimeter College seeks to provide an environment that is free of bias, discrimination, and harassment. If you have been the victim of sexual harassment/misconduct/assault, we encourage you to report this. If you report this to a faculty member, he or she must notify one of our college's Assistant Title IX Coordinators / Student Deans about the basic facts of the incident (you may choose whether you or anyone involved is identified by name). For more information please refer to our sexual misconduct website.**

## **AFFIRMATIVE ACTION STATEMENT**

GSU - Perimeter College adheres to the affirmative action policies designed to promote diversity and equal opportunity for all faculty, staff, and students.

## **VETERAN AND SERVING MILITARY STATEMENT**

GSU - Perimeter College honors its military and veteran men and women returning to pursue their educational goals. A Military Outreach Center is provided for them on the ground floor of Building H on the Clarkston Campus. Veterans, serving military, their dependents, and the survivors of serving military who are attending college are encouraged to avail themselves of a full range of college services and activities through the MOC. MOC resource tables are also located on all campuses to provide them with valuable information. The Center maintains a Military Outreach website at <http://veterans.gsu.edu//> and their telephone number is 678-891-3025.

## **Learning and Tutoring Center**

The LTC offers FREE, walk-in tutoring and academic support at FIVE Perimeter College campuses. The LTC provides a variety of other resources and services to accommodate student needs. All LTCs are equipped with computers, instructional software and internet access. Please visit the LTC's website (i.e. [success.students.gsu.edu/ltc](http://success.students.gsu.edu/ltc)) to find information about locations, hours of operation, tutoring and workshop schedules, handouts, online tutoring and links to online practice resources.

### **Contacts:**

Alpharetta Campus: Dr. Lizann Gibson, [lgibson@gsu.edu](mailto:lgibson@gsu.edu)  
Clarkston Campus: Mary Hamilton, [mhamilton@gsu.edu](mailto:mhamilton@gsu.edu)  
Decatur Campus: Sohayla Mohebbi, [smohebbi@gsu.edu](mailto:smohebbi@gsu.edu)  
Dunwoody Campus: Nancy McDaniel, [nmcdaniel@gsu.edu](mailto:nmcdaniel@gsu.edu)  
Newton Campus: Arne Paulsen, [apaulsen@gsu.edu](mailto:apaulsen@gsu.edu)

## **Basic Needs Statement:**

Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact the Dean of Students for support.

Furthermore, please notify the professor if you are comfortable in doing so. This will enable us to provide resources that we may possess.

The Embark program at GSU provides resources for students facing homelessness.

**IMPORTANT DAYS**

Fall 2019 Semester Calendar			
Events	Full Semester	Mini-Mester I	Mini-Mester II
Schedule of Classes available on PAWS	Mar 18	Mar 18	Mar 18
Registration	Apr 1 – Aug 25	Apr 1 – Aug 25	Apr 1 – Aug 25
Late Registration	Aug 26 – 30	Aug 26 – 30	Aug 26 – 30
Classes Begin	Aug 26	Aug 26	Oct 14
Holiday (Labor Day)	Sep 2	Sep 2	N/A
Midpoint	Oct 15	Sep 13	Nov 1
Thanksgiving Break	Nov 25 – 30	N/A	Nov 25 – 30
Classes End	Dec 9	Oct 9	Dec 3
Final Exams	Dec 10 – 17	Oct 10 – 12	Dec 4 – 6
Grades Due at 5 p.m.	Dec 19	Oct 15	Dec 19