SUPPLEMENT to SYLLABUS
PRINCE GEORGE'S COMMUNITY COLLEGE
CHM 1030 General Chemistry II Lab Fall 2025

SECTION LD01
Lec Th 11:00-11:50 am CHES 316, **Lab** Th 12:00 – 3:00 pm CHES 316

INSTRUCTOR: Dr. William Antonio Boyle, Natural Sciences Department
Dept. Phone: 301.546.0420 **Office Phone**: 301.546.4105 **OFFICE:** CH-310-K

OFFICE HOURS: M Tu W Th 4:00-4:50 ZOOM, or in-person, or by appointment
WEBPAGE: https://www.angelfire.com/md/imsystem/WBhomePGCC.html
CANVAS SITE: Access the course Canvas site from myPGCC using your login and password.

E-MAIL: boylewa@pgcc.edu

NOTE: All credit students are required to use their PGCC student email account for all college communication. Full-time and adjunct faculty teaching online, remote, hybrid, and/or face-to-face courses are expected to respond to student emails and phone calls within 24-48 hours with the exception of weekends and holidays. Faculty should maintain regular communication with students.

REQUIRED MATERIALS: ① The Lab worksheets for each lab will be available in the course Canvas site. Please print and bring your copy of the lab worksheet for each lab experiment.
② Scientific calculator (TI-83 or 84 or similar graphing calculator strongly urged; it will be used for lab and class assignments)

How Will You Be Assessed?

Below is a list of the assessments for this semester.

4 performance laboratory activities at 75 points each		300 points
7 regular-lab activities or problem assignments		175 points
Midterm exam		100 points
Lab final exam		200 points
attendance/participation/extra-credit		25
	TOTAL:	800 points

Course Description: This course introduces a number of modern and classical analytical methods including instrumentation and the computer. Measurement and its error are examined in detail due to the analytical approach taken in the course. We will analyze familiar household products where possible. Some of the experiments expand topics covered in CHM-1020 (kinetics, equilibrium constant, electrochemistry), while others build on topics from CHM-1010.

Prerequisite(s): CHM-1010; CHM-1020 completed or concurrent.
Corequisite(s): CHM-1020 completed or concurrent

GRADING CRITERIA: Grades are assigned based on the grading policy stated in the syllabus and not the Canvas grade book. Changes may be made to this syllabus at the instructor's discretion.

Course Learning Outcomes Upon successful completion of this course, the student will be able to:

1. Analyze scientific data for physical and chemical systems with tools such as graphing calculators and spreadsheet programs.
2. Report results of laboratory measurements with appropriate precision and accuracy, and in proper scientific format.
3. Quantify measurement error with statistical measures.
4. Evaluate the accuracy and precision of multiple measurements.
5. Analyze data from techniques including potentiometric, photometric, conductometric and complexometric methods, and electrochemical and spectroscopic techniques.
6. Compare methods of chemical analysis.

Credit-hours:

At Prince George's Community College, for all credit courses, students are expected to spend a minimum of 37.5 hours of course time per credit. Course time consists of both direct faculty instruction and out-of-class student work. This course is a 2-credit course. This course achieves the minimum of 60 hours of course time by requiring 45 hours of direct faculty instruction and 15 hours of out-of-class student work.

NA and FX GRADES: Students are expected to attend and participate in class activities. Students who either never attended the class or who ceased attendance during the first during the first three weeks of class or 20 percent of the course will be assigned a "NA" grade by the instructor.

The FX GRADE may be assigned by the faculty member to any student on the roster who did not officially withdraw from the course but who failed to participate in course activities through the end of the period. It is used when, in the opinion of the instructor, completed assignments or course activities or both were insufficient to make normal evaluation of academic performance possible.

WITHDRAWAL STATEMENT: As the semester continues, I hope to see all of you staying in my course and doing well. However, if you are considering withdrawing from this course, your withdrawal may result in financial aid and /or academic standing implications. Therefore, if you are considering withdrawing at any point, please speak with me before making a final decision. I may be able to offer to direct you to help. If I am unavailable, please contact Prof. Nadene Houser-Archield via email at housernr@pgcc.edu or by telephone at 301-546-7593.

What is This Chemistry Course Going to Be Like?

This section of CHM 1030 will be structured differently than what you may expect. We want you to "discover" chemistry concepts through lab exploration and interaction with fellow students and the instructor. It is an exciting way to learn chemistry.

The *laboratory activities* of this course are time to discover chemistry concepts and practice science process and learn new skills. You will discuss what you see and do with other

members of the class and the instructor. **You are responsible for all information learned here**. There are FOUR labs that are designated as **performance labs**. On the days when you are engaged in a performance activity the instructor will be evaluating your understanding and skills. You generally work as an individual for these tasks.

The *lecture/discussion* portion of the course will have varied activities. Sometimes the instructor will provide information to extend or clarify what is learned in the laboratory. Sometimes you will engage in classroom activities that allow you to discover concepts in a way similar to your activities in lab. We will practice understanding through problem solving. You need to keep good notes on discussion from lab and lecture/discussion periods. We may use this time to go over assigned problems from the chapters in the text.

You are free to ask questions at anytime on material we are discussing or material related to it. Have your calculator and text with you during class. Exams will be given during the lecture/discussion time.

What Do You Need to Do to Be Successful In this Chemistry Class?

Attend (in mind and body) all class sessions. Arrive on time and stay for the whole time. Experience shows that you will not be successful if you are not present. If you arrive late let the instructor know so you can be registered as present.

⇒ Read and use your syllabus packet. Not only does this provide the lab/discussion schedule but it also provides knowledge and process goals, and textbook problem assignments.

⇒ Read the material in the textbook as it is covered in class. **Do the assigned questions at the end of each chapter as we finish the section. Don't wait until the end of the chapter or the night before the quiz or exam.** This is an excellent way of assessing your understanding of the concepts we have been covering.

⇒ The labs you will be doing are inquiry-based. That means you are investigating, testing, challenging ideas, and learning rather than just following directions to verify something you already know. **Read the lab activity before coming to lab class so that you will be oriented to the task. Do any pre-lab questions before getting to lab.**

⇒ Complete all assignments on time. Points are deducted for late assignments.

⇒ **ASK** if you have a question. Don't wait for revelation... The sooner you address a problem, the easier it is to solve.

⇒ Weekly out-of-class STUDYING time is at minimum the same amount as in-class time! Study and review notes and/or handouts *as soon as possible* after class. Work with classmates to help clarify your thought processes and as practice. Forming a study group is highly recommended.

⇒ During exams or quizzes, cellphones or internet-capable devices are **not** allowed, and calculators may **not** be passed to another person.

⇒ Maintain your success record. Use the chart you are given for assignments and point values. Keep it up to date and assess your status now and then.

What Do You Do If You Are Absent?

Get notes from a classmate. If you have difficulty grasping a concept you missed come to office hours for a conference (however, please do not expect a private lecture).

Late Assignments

Late assignments will be accepted for up to two days but penalized by 25% each 24-hour period. For example, if you scored an 10 out of 10 for a lab, but it was submitted 5 minutes late, you would only receive 7.5 out of 10 as the final score. If you have submitted 24 hours late, you would receive 5 out of 10.

Attendance and Make-Up Policy

Attendance is mandatory. There are no makeup lab assignments available for this course. However, in the event of anticipated excused absences, it may be possible to make arrangements to make up at most two labs prior/after to the absence. Students are responsible for communicating with the instructor as soon they know that an absence might occur or as soon as possible in the case of an illness. To qualify for a make-up assignment, the absence must be due to illness, religious obligations, recognized college activities, unavoidable circumstances, or have prior instructor permission In any case, a make up activity will not be available after 48 hour period. To request a make-up lab, the request with supporting documentation must be completed 5 days before the lab. To request a make-up lab for a missed lab due to unavoidable circumstances, such as being hospitalized due to illness, the online form with supporting documentation must be completed within 48 hours after the missed assignment. Excused absences will be evaluated on a case by case basis to determine whether full credit or partial credit may be awarded. Vacation, non-emergency doctor's appointment, vehicle's breakdown, or other reasons such as travel plans are NOT recognized as a valid excuse for taking a make-up evaluated activity.

Where Can You Get Help?

Your first and best source of help is your instructor! Make use of my office hours. If you cannot come during the scheduled times, talk to me and I will try to arrange an alternate time.

PGCC offers additional help at the Tutoring Center which is now offering ONLINE as well as in-person tutoring. Check it out at – https://pgcc.libguides.com/tutoring

If you can, form study groups with your classmates. This is a great way to sharpen your thoughts and get practice in a less threatening way.

MYPGCC: Use **myPGCC** to provide quick access to Canvas, Owl Alert, Owl Link, Owl Mail, PGCC news, information, student events and more. Access **myPGCC** at my.pgcc.edu or from www.pgcc.edu. Log in using your Owl Link user ID and password.

DELAYED COLLEGE OPENINGS:

To sign up for text alerts such as school closings and delays, go to www.pgcc.edu, click Services & Support, and then click the Owl Alert icon. Owl Alert is the college's instant messaging and email notification system.

CYBER DAY:

In the event of inclement weather, national or local emergency, or special event, the college may declare a cyber day. On cyber days all course formats will **continue** in a remote format. Students should consult their college email and the Canvas learning management system for further information about the class meeting.

COLLEGE POLICIES

All college policies regarding Disability Support Services; Community in Unity Civility Pledge; Title IX: Complaint and Grievance Process, Pregnant and Parenting Accommodations; Code of Conduct, Code of Academic Integrity, Health and Wellness, College Central Network (CCN), and more can be found on your Canvas course site under Academic and Important College Policies under the Syllabus menu link - OR - you can visit: https://catalog.pgcc.edu/content.php?catoid=31&navoid=5173

CODE OF CONDUCT

The Prince George's Community College Code of Conduct defines the rights and responsibilities of students and establishes a system of procedures for dealing with students charged with violations of the code and other rules and regulations of the college. A student enrolling in the college assumes an obligation to conduct himself/herself in a manner compatible with the college's function as an educational institution. Refer to the 2019-2020 Student Handbook for a complete explanation of the Code of Conduct, including the Code of Academic Integrity and the procedure for dealing with disruptive student behavior.

CODE OF ACADEMIC INTEGRITY

The college is an institution of higher learning that holds academic integrity as its highest principle. In the pursuit of knowledge, the college community expects that all students, faculty, and staff will share responsibility for adhering to the values of honesty and unquestionable integrity. To support a community committed to academic achievement and scholarship, the Code of Academic Integrity advances the principle of honest representation in the work that is produced by students seeking to engage fully in the learning process. The complete text of the Code of Academic Integrity is in the 2019-2020 Student Handbook and posted on the college's website.

COMMUNITY IN UNITY CIVILITY PLEDGE

As a member of Prince George's Community College, I agree to promote a community of scholarship, civility, accountability and respect. I understand that expressions of hate or bias against a particular group or towards an individual, threaten the safety of our campus community. Therefore, I pledge to be aware of my words and actions and how they impact others. I will show respect for myself, respect for others and respect for the college and its values. I will honor this commitment to promote unity and a culture of civility both inside and outside the classroom.

Civility is a college-wide commitment and in order to identify PGCC students, students are required to enter classrooms with their college IDs visible. ALL students must have their IDs visible while AT ANY COLLEGE SITE, WHETHER THEY ARE ON THE LARGO CAMPUS OR ANY EXTENSION SITE.

Pregnant and Parenting Accommodations

Due to Title IX regulations, PGCC is required to take reasonable steps to ensure that any student with certain pregnancy-related or post-pregnancy issues who must miss classes/coursework, take breaks during class, etc. due a pregnancy-related condition will return to the same position of academic progress as before they experienced medical challenges.

If you have a pregnancy-related issue, please contact the Title IX Coordinator at TitleIX@pgcc.edu or 301-546-7011 to discuss pregnancy or parenting accommodations. If a student discloses pregnancy to their course instructor, the instructor should inform the student that they have the right to contact the Title IX Coordinator for accommodations or to discuss accommodations directly with the instructor.

Some Information You Need to Know About the Science College Classroom at PGCC…

In the Division of Sciences, Technology, Engineering and Mathematics (STEM), we have set goals toward excellence for our students, faculty, and programs. While you are in class it is important to focus on the tasks at hand and to make the environment safe and conducive to learning for everyone. To accomplish our goals, there are some assumptions and policies you should be aware of.

- You are an adult and it is assumed that you will act accordingly. This means being on time for class, conducting yourself appropriately while in class, being prepared for class (reading the syllabus/schedule), participating in course activities, completing assignments on time, and taking responsibility for your own performance. You may have a complicated life but you must earn a grade on merit, not on extenuating circumstances. Instructors will assist you within reason but you must take the initiative to seek help if needed.

- PGCC has an "Academic Dishonesty" policy and unethical academic behavior (cheating, plagiarism, etc.) is not tolerated. There are serious ramifications for the student(s) involved. If you would like a copy of the policy, please ask the instructor.

- No food or drink is allowed in classrooms that serve as laboratories (all rooms on the 2nd and 3rd floors of Chesapeake Hall). Please observe this ban unless exceptions are approved by the instructor.

- Cell phones must be turned off or set to vibrate while in class. Only emergency calls can justify leaving a class in session. Phones cannot be used in the classroom during instruction of any type (lab, discussion, recitation, lecture). Cell-phones internet-capable devices are **not** allowed in exams!

- If you must leave a class early or miss class time, please let the instructor know. YOU are responsible for making up any missed material. Make-up exams/assignments may be available depending on the circumstances of the absence. See the instructor's individual policy in the syllabus regarding absences.

CHM 1030 Section LD01 TENTATIVE SCHEDULE Fall 2025

This schedule is subject to change based on contingencies such as weather. Exact dates for labs and assessments will be announced in class. If you are absent, be sure to check with the instructor or classmates to determine schedule changes or additions. Changes may be made at the discretion of the instructor.

Week/Dates	Topics	Assessments
1. 08/18-08/21	Introduction to Lab Safety/ Types of errors and significant figures	Safety Quiz
2. 08/25-08/28	Use of Analytical Balance	Sig.Fig. Quiz Lab report
3. 09/01-09/04 *No class on 09/01*	Using excel and Linear Regression in General Chemistry (Dry Lab)	Quiz
4. 09/08-09/11	Measurement Variation	Lab report
5. 09/15-09/18	Accuracy & Precision	Performance Task#1
6. 09/22-09/25	More Lights, Color and Absorption	Lab report
7. 09/29-10/02	Conductometric Measurement	Lab Report
8. 10/06-10/09	Characterization of Weak Acid	Lab report
9. 10/13-10/16 *No class on 10/14*	**Mid-Term**	**Mid-Term**
10. 10/20-10/23	Titrimetric Analysis of Antacid	Performance Task#2
11. 10/27-10/30	Determination of Crystal Violet	Lab report
12. 11/03-11/06	Spectroscopic Determination of Equilibrium Constant for an Ion Complex	Performance Task #3
13. 11/10-11/13	Investigation of Electrochemical Reactions	Lab report

Week/Dates	Topics	Assessments
14. 11/17-11/20	Culminating Chemical Analysis	Performance Task#4
15. 11/24-11/27 *No class on 11/27*	No class! Thanksgiving Day!	
16. Final Exam	Thursday, Dec. 4	**Final Exam (Cumulative)** **11:00 am – 1:20 pm**

**** Performance Lab Reports are due the same day of the lab (end of the lab).**

All other lab reports are due before the midnight the day of the lab.

CHM 1030 STUDENT GRADE RECORD Fall 2025

Your current grade (%) = (Your total points/Total of maximum possible points to date) x 100

100-90% = A 89-80% = B 79-70% = C 69-60% = D below 60% = F

Assessment	Maximum Possible Points	Your Points	%
Performance Lab 1	75		
Performance Lab 2	75		
Performance Lab 3	75		
Performance Lab 4	75		
Lab Reports	175		
MidTerm Exam	100		
Final Exam	200		
Participation/Ex-Cr	25		
Total	800		

Note: Do not make the mistake of averaging the %s for each assessment to arrive at your overall %. Not all assessments have equal weight and averaging