



**Assessments:**

|   |            |
|---|------------|
| 3 performance laboratory activities at 50 points each | 150 points |
| Lab activities and problem assignments                | 75 points  |
| Culminating Chemical Analysis Task                    | 100 points |
| 2 hour exams at 100 points each                       | 200 points |
| Attendance/participation                              | 25 points  |

**TOTAL: 550 points**

**Friday Discussion:** Background material, including use of the graphing calculator and computer for calculations and graphing, and practice problems (handouts) will be covered in the discussion. Come to class ready to listen and participate in the discussion of the experiment performed on Wednesday. This Friday session is a very crucial part of this course and new content and information is provided. You will need to put in time outside of lab and class to work on problem sets, projects, laboratory activities, and studying.

**Network of Communication:** You, as a student, need to be able to exchange information and/or results of laboratories, by phone, e-mail, or at a meeting place. It is your responsibility to make these arrangements before things are due in class.

**Attendance and Participation:** Be on time to lab and class! Group lab and discussion activities require group participation by all members in a group. It is unfair to the students who arrive on time, so late-comers to the laboratory may find themselves working alone for group activities rather than with a group. Lateness and/or lack of preparation will result in loss of attendance/participation points.

**Performance Tasks and other graded labs will consist of the pages from the manual plus additional computations and graphs.**

- Each graded activity is due at the end of the lab in which it is done unless otherwise specified. Be sure to check with the instructor if you are not sure of the due date. These labs are submitted to a box in CH-100, not to the instructor directly.
- A penalty of 20% per day will be assessed for late reports or other assignments without acceptable documentation.
- Make-up will NOT be possible without prior consent of your instructor or documentation of a serious problem that causes an absence.

**Exams:**

Exams cover material given in lectures plus experimental methods and calculations. Exams may include a take-home component that will be provided in the Friday sessions.

**If you are going to miss an exam, you MUST:**

1. Have a documented excuse; AND
2. Notify your instructor before the exam or within 24 hours after the exam via phone or e-mail.

**Once an exam is returned to students and you have not contacted the instructor, you no longer have a make-up option.**

### **Culminating Chemical Analysis Task:**

Each student working alone will perform a chemical analysis based on laboratory techniques and procedures acquired during the semester. Measurement error and laboratory safety will also be considered in the task. This is a practical laboratory exam to assess the skills you have obtained and your ability to analyze data and is based on the "Expected Course Outcomes" given above. The results will be handed in at the end of the laboratory period. Instructions for this task, including how it is graded, will be provided near the end of the course.

**Cheating and plagiarism will not be tolerated in this class. Maximum penalties will be applied.**

#### **CIVILITY STATEMENT**

To promote a community of scholarship and civility, everyone at Prince George's Community College is expected to be respectful, tolerant and courteous towards others at all times, adhere to college policies and procedures, and respect college property. Creating a culture of civility both inside and outside the classroom is everyone's responsibility.

#### **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 2010-2011 Student Handbook, beginning on page 38, 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 2010-2011 Student Handbook (pages 40-42) and posted on the college's website.

Be considerate to other members of the class and don't be disruptive. **Cell phones or other electronic communication devices are NOT to be on or used in the laboratory or Friday discussion.**

#### **Where to Get Help:**

1. See me during office hours, or call for appointment at other times.
2. Visit the Tutoring Center (call for appointments - 301-322-0748) in Bladen Hall room 107 (other student services - call 301-322-0886).
3. Computer lab (CH-309) hours are posted. See other open labs for hours.
4. Many great student support items can be found on the Physical Sciences and Engineering Department webpage - <http://academic.pgcc.edu/psc>

Point values for each lab, problem set or exam are in parentheses.

| WEEK | DATES        | WEDNESDAY LAB  | FRIDAY DISCUSSION  |
|------|--------------|--|--|
| 1    | 9/01, 9/03   | Use of the Analytical Balance  | Introduction   |
| 2    | 9/08, 9/10   | Measurement Variation  | Measurement and Error  |
| 3    | 9/15, 9/17   | Sampling Variation   | Data Analysis  |
| 4    | 9/22, 9/24   | Accuracy and Precision of Volume Measuring Devices ( <b>50 performance task</b> )          | Simple Statistics with Problem Set ( <b>15</b> )<br>Volumetric Calculations<br>Scatter in Data |
| 5    | 9/29, 10/01  | More Lights, Color, and Absorption ( <b>15</b> )   | Spectrophotometry  |
| 6    | 10/06, 10/08 | Conductometric Measurements ( <b>15</b> )  | Conductivity Measurements  |
| 7    | 10/13, 10/15 | Standardization of a Base and Titration of Vinegar   | Acid-Base Titration<br>pH Measurements   |
| 8    | 10/20, 10/22 | Characterization of a Weak Acid by Potentiometric titration ( <b>50 performance task</b> ) | EXAM I ( <b>100</b> )  |
| 9    | 10/27, 10/29 | Kinetics of Crystal Violet Reaction and STELLA model (10)                                  | Spectrophotometry as a Tool for Equilibrium and Kinetics Measurements                          |
| 10   | 11/03, 11/05 | The Kinetics of Enzyme Reactions - Computer-based lab ( <b>50 performance task</b> )       | Enzyme Kinetics  |
| 11   | 11/10, 11/12 | Equilibrium Constant Determination for $\text{Fe}(\text{SCN})^{2+}$                        | Problem Solving ( <b>15 points</b> )   |
| 12   | 11/17, 11/19 | Discovering Intramolecular Interactions<br><b>Last day to withdraw with W is 11/19</b>     | IMFs   |
| 13   | 11/24, 11/26 | <b>NO CLASS</b>  | <b>NO CLASS</b>  |
| 14   | 12/01, 12/03 | Studying Vibrations in Molecules ( <b>15</b> )   | IR Spectroscopy  |
| 15   | 12/08, 12/10 | Culminating Chemical Analysis Task ( <b>100</b> )  | EXAM II ( <b>100</b> ) <b>8 AM</b>   |