

State University of West Georgia
Department of Chemistry
Summer Semester 2007

Chemistry 3301K Lecture: 9:00 - 12:00 MW, Lab: 1:00 - 5:00 T

Instructor: Dr. John E. Hansen

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Text: Analytical Chemistry, 8th Edition, Skoog, West, and Holler, Saunders Publishing.

Expectations: It is my desire that each of you will succeed in this course. I will try to help you in anyway I can. It is vitally important you keep up with the material. I have found, without exception, those that received a grade of A or B in this course have been those that have consistently done the homework and took it seriously. Please see me if you are having difficulties.

Examinations: I will give three exams (each 90 minutes in length) scheduled in the throughout the semester. I will **not** give makeup exams. You will have one week from the time the exam is handed back to inquire about the grading. After that week the grade on the exam is **final**. The final exam will be a comprehensive examination (covering material throughout the course). Each exam will count 100 points, and the final exam 150 points.

Laboratory: You will have seven laboratory exercises that will count a total of 100 points toward your final grade. The points will be evenly distributed over all the exercises. You will have one week from the time you finish the laboratory to hand in your lab report. The report will be handed in at the beginning of the next lab period. This will have to be modified for the last lab report, which you will have less than a week to complete. **I will not accept any lab reports handed in after the prescribed time, which will result in a zero for those lab reports.**

Grading: The final grade will be determined from the three exams, the final exam, and the laboratory exercises. Grades will be calculated based on a maximum of 550 points. Grade Scale: > 90% = A; 80 - 90% = B; 70 - 80% = C; 60 - 70% = D; < 60% = F.

Policies

1. You are responsible for all material covered and all announcements made in class. Absence from class does not excuse or relieve you of this responsibility.
2. Cheating will not be tolerated. It will result in a grade of zero. All out of class assignments will be done in the **absence** of any collaboration. All questions, clarifications, or requests for assistance should be directed only to me.
3. No make-up exams will be given. Anyone not able to take an exam on the day scheduled must contact me before the exam.
4. Your attendance at all class times is critical to your success in this course. I reserve the

- right to withdraw you from class roles due to flagrant absences or tardiness.
5. NO CELL PHONES!! They need to be placed completely out of my sight and turned off during my class. I do mean put away (not left on your belt). Place them in your packs or leave them in your vehicle. If you violate this rule you will be asked to leave my class, and docked 10 points on the next exam. If you violate this rule during an exam it will be considered as an incident of cheating.
 6. If you contact me by email you are expected to use your UWG account.

TENTATIVE LECTURE SCHEDULE

6/04	Introduction, Errors in Analysis	1, 2, 5, 6
6/06	Application of Statistics to Data Analysis, Gravimetric Analysis	7, 12
6/11	Gravimetric and Titrimetric Methods of Analysis	12, 13, 9
6/13	Aqueous Solution Chemistry	9
6/18	Ionic Equilibria & Exam I	
6/20	Ionic Equilibria	10
6/25	Equilibria of Complex Systems	11
6/27	Equilibria of Complex Systems	11
7/02	Acid/Base Titrations	14
7/09	Complex Acid/Base Systems & Exam II	15
7/11	Complex Acid/Base Systems	15
7/16	Complex-Formation Equilibria	17
7/18	Electrochemistry	18, 19
7/23	Oxidation/Reduction Equilibria & Exam III	19, 20
7/26	Final Exam	

TENTATIVE LABORATORY SCHEDULE

6/05	Introduction & Check In
6/12	Gravimetric Analysis
6/19	Standardization of NaOH

6/26 Determination of the pK_a of Weak Acids
7/03 EDTA Titration of Divalent Metal Cations
7/10 Redox Titration
7/17 Beer's Law
7/25 Colorimetric Determination of the pK_a of a weak acid