

George Mason University - CHEMISTRY 212  
Laboratory Syllabus - Fall 2011

Laboratory Manual: Suzanne Slayden, 1999, Chemistry 211, 212, 251 Laboratory Experiments, 3<sup>rd</sup> Edition, GMU Bookstore, Johnson Center.

**Web Site** is where procedures not currently found in the lab manual can be downloaded. It is also the page from which computer spreadsheet results are retrieved: <http://chem.gmu.edu/results>

<b>Week of:</b>	<b>Laboratory Experiment</b>	<b>Pages</b>
Monday, Aug. 29 <sup>th</sup> to Friday, Sept. 2 <sup>nd</sup>	Check-in, Enrollment Verification, Course Policies Lab Safety,	1-12, 19-21 127-130
<b>Monday, Sept. 5<sup>th</sup></b>	<b>Labor Day — Monday Labs Do Not Meet</b>	
Tuesday, Sept. 6 <sup>th</sup> to Monday, Sept. 12 <sup>th</sup>	Expt 1. Redox Titration of Oxalate by Permanganate	121-126
Tuesday, Sept. 13 <sup>th</sup> to Monday, Sept. 19 <sup>th</sup>	Expt 2. Molecular Mass by Freezing Point Depression	107-112
Tuesday, Sept. 20 <sup>th</sup> to Monday, Sept. 26 <sup>th</sup>	Expt 3. Kinetics, Part I — Crystal Violet	Web Site
Tuesday, Sept. 27 <sup>th</sup> to Monday, Oct. 3 <sup>rd</sup>	Expt 4. Kinetics, Part II— Iodine Clock Reaction	Web Site
Tuesday, Oct. 4 <sup>th</sup> to Tuesday, Oct. 11 <sup>th</sup>	Expt 5. Measurement of Equilibrium Constant	145-154
<b>Monday, Oct. 10<sup>th</sup></b>	<b>Columbus Day — Tuesday Labs Do Not Meet — Monday Labs Meet on Tuesday, Oct 11<sup>th</sup></b>	
Wednesday, Oct. 12 <sup>th</sup> to Tuesday, Oct. 18 <sup>th</sup>	Expt 6. Acidity Constant by pH Titration Curves	165-169
Wednesday, Oct. 19 <sup>th</sup> to Tuesday, Oct. 25 <sup>th</sup>	Expt 7. Dissociation Constants of Acids and Bases	155-164
Wednesday, Oct. 26 <sup>th</sup> to Tuesday, Nov. 1 <sup>st</sup>	Expt 8. Molar Solubility and the Common-Ion Effect	Web Site
Wednesday, Nov. 2 <sup>nd</sup> to Tuesday, Nov. 8 <sup>th</sup>	Expt 9. Thermodynamics of the Dissolution of Borax	Web Site
Wednesday, Nov. 9 <sup>th</sup> to Tuesday, Nov. 15 <sup>th</sup>	Expt 10. Spectroscopic Determination of Aspirin	Handout
Wednesday, Nov. 16 <sup>th</sup> to Tuesday, Nov. 22 <sup>nd</sup>	Expt 11. Simultaneous Determination of K <sup>+</sup> and Fe(III) by Ion-Exchange Chromatography	Handout
<b>Wednesday, Nov. 23<sup>rd</sup> to Friday, Nov. 25<sup>th</sup></b>	<b>Thanksgiving Holiday – Wednesday, Thursday, Friday Labs Do Not Meet</b>	
Monday, Nov. 28 <sup>th</sup> to Friday, Dec. 2 <sup>nd</sup>	Expt 12. Electrochemical Measurements	Web Site
<b>Monday, Dec. 5<sup>th</sup> to Friday, Dec. 9<sup>th</sup></b>	<b>Clean up and Check Out, Lab Exam</b>	

**THERE ARE NO MAKE-UP LABS IN CHEMISTRY 212.** In the event of an unavoidable absence, the instructor must be notified as soon as possible to obtain approval for attending another lab section. If no prior notice of the absence is given to the instructor, then a grade of zero will be given for the missed lab. A student cannot receive a passing grade in this course unless at least *ten* of the twelve lab experiment sessions are attended *and satisfactory reports for them handed in on time*. Attending a lab session and not performing the experiment does not constitute completing an experiment. Dry-labbing (analyzing data that you did not collect) is an honor code violation and will be dealt with accordingly. Letter grades are not assigned in the laboratory; the percentage of points earned for the lab is incorporated into the overall grade calculated for the course by your lecture instructor.