

Introduction to Chemical Research Techniques

Chemistry 129 – Summer 2006

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Requirements: One of the following: Chem 0123, 0124, 0183, 0184, 0193, or 0194.

Course Description: Choice and statement of a research problem. Use of scientific literature, scientific method, design and execution of experiments, data analysis, drawing conclusions, and writing and presenting scientific reports and papers. Note: This course is a prerequisite for all chemistry laboratory courses numbered 0200 and above. Mode: One hour lecture per week.

Textbooks: [Quantitative Chemical Analysis, 6th Ed.](#) by Daniel Harris, Pub: W. H. Freeman & Co.

Suggested Materials: Access to a computer and spreadsheet program. Our examples will use Microsoft Excel, but other programs may have similar functions.

Class Day & Time: Mon & Wed 3:00 – 4:00 PM BB 205

Office Hours: Before class or by appointment.

Grades:

Homework	75 %
Final	25%
Total	100%

Course grades will be based on a $\geq 90\%$ A/A-, $\geq 80\%$ B+/B/B-, $\geq 70\%$ C+/C/C-, etc. of the total points earned. No late homework assignments or lab reports will be accepted; zero grades will be recorded.

Calendar of Events:

Week	Summer 2006		Topics	
1		15 17	Lab equipment tolerances	Proper use of glassware
2	May	22 24	Sig Figs	Error Analysis
3		29 31	Labor Day Holiday	Statistics
4		5 7	Linear regression stats	Data Modeling
5	Jun	12 14	Data Modeling	
6		19 21	Data Modeling	
7		26 28	Review	Final Exam

Other Policies:

- All students must have a Temple email address – check it daily for course information.
- Enrollment in a course implies intent to attend regularly.
- Excessive absences may be reported to your adviser, may jeopardize your grade, or may jeopardize your continuance in the course. You are responsible for missed work.
- Incomplete Course Work: Reserved for emergencies only and requires a written agreement describing the nature of the work to be completed and the completion deadline. A default grade must be stated and will be entered if the student's work is not completed or if the instructor does not change the "I" grade within one year.
- Last day to drop, Monday September 12.
- Last day to withdraw (no refund): Monday October 31. Students who have previously withdrawn from this course, or who have already withdrawn from 5 courses since September 2003 may not withdraw.