Chem 3020

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Objectives:	tives: 1. Be familiar with the Windows operating system.	
	2. Enhance word processing skills.	
	3. Become an expert in the chemistry applications of spreadsheet software.	

4. Understand the fundamentals of computer-assisted data acquisition.

5. Become proficient in preparing, formatting, & submitting electronic reports.

6. Develop skills in importing and exporting data into/from various platforms.

Week	Date	Lecture Topic:	Assignments:
1	8-Jan	Overview, facilities, Windows environment, Email, and networks	Using WSU Email, send your name, major, expertise level, & interests <i>(by</i> <i>Friday)</i>
2	15-Jan	Word Processing: Creating, saving, editing and importing documents; tables, figures, equations	Create WP document including table, equation, & header
3	22-Jan	Spreadsheets: data entry, sorting, & functions	WEB Sheets # 1, 2, 3
4	29-Jan	Spreadsheets: Evaluation of equations & graphing data	WEB Sheets # 4, 5, 6
5	5-Feb	Spreadsheets: Linear and non-linear trend lines	WEB Sheets # 7, 8, 9
6	12-Feb	Spreadsheets: Regression analysis; instrument calibration plots	WEB Sheets # 10,11,12
7	19-Feb	Spreadsheets: Advanced plotting techniques, evaluation of intercepts, and reiterative calculations	WEB Sheets # 13,14,15
8	26-Feb	Spreadsheets: Determination and comparison of endpoints of acid-base titrations	WEB Sheets # 16,17,18
9	5-Mar	Spring Break	
10	12-Mar	Spreadsheets: Writing, executing and debugging macros	WEB Sheets # 19, 20
11	19-Mar	Spreadsheets: Matrix operations- Solutions to multiple linear equations	WEB Sheets # 21, 22
12	26-Mar	Database Functions in Excel	Web Sheet # 23
13	2-Apr	Drawing Programs: Molecular drawing software, importing and exporting graphical images	Draw Molecular Structures (Handout)
14	9-Apr	Review; Overview and Conclusions; The future of computing in modern chemistry laboratories	Receive Take-home Final Exam
15	16-Apr	Submit Final Exam (No lecture)	Final Exam Due: Electronic pdf version due TODAY.