## CHEMISTRY 1411

# SUMMER 2011

## LECTURE AND EXAM SCHEDULE

DATE		CHAPTER
5/9	$\mathbf{M}$	± 1
5/10	T	1
5/11	W	2
5/12	R	2
5/16	M	3
5/17	T	3
<u>5/18</u>	W	TEST #1 CHAPTERS 1, 2, 3
5/19	R	4
5/23	M	4
5/24	T	5
5/25	W	5
5/26	R	5
5/31	<u>T</u>	TEST #2 CHAPTERS 3, 4, 5
6/1	W	6
6/2	R	6
6/6	M	, 7
6/7	T	
6/8	W	8
6/9	R	8
6/13	M	
6/14	T	9
6/15	W	9
6/16	R	9
6/20	M	10
6/21	T	10
6/22	W	10
6/23	R	FINAL EXAM; COMPREHENSIVE; CHAPTERS:
		1 TO 10

### **Academic Policies**

- No food or drink during lecture/lab
- No children allowed in class (insurance reasons)

#### **Testing**

- No leaving to use the rest room or get a drink during exam
- After first test has been turned in no other tests can be given out
- All back packs and books will be left along the wall
- Tests are 1 hour and 45 minutes

#### **Attendance**

 If fail to sign in when sheet is passed out then considered absent (10 minutes)

### CHEMISTRY 1411

## SUMMER 2011 LAB SCHEDULE

5/9	LAB # 1	SAFETY AND MEASUREMENT
5/16	LAB # 2	DENSITY
5/23	LAB # 3	CLASSIFICATION OF MATTER
6/6	LAB # 4	STOICHIOMETRY
6/13	LAB # 5	HEAT AND CALORIMETRY
6/20	LAB # 6	FLAME TEST AND MOLECULAR
		GEOMETRY

PLEASE BE ON TIME (4 P. M.) AND FOLLOW ALL THE SAFETY RULES.

A LAB REPORT IS REQUIRED PER STUDENT (DUE: MONDAY @ 2 P. M.)

THERE ARE NO MAKE-UP LABS.
A ZERO WILL BE RECORDED FOR EACH ABSENCE.

## RUBRICS FOR LAB REPORTS

TITLE	CLEARLY,	ALMOST	VAGUELY	DOES NOT
IIILE	CONCISELY &	CLEARLY,	STATES TITLE	STATE TITLE
			SIAIES HILL	SIAIL HILL
	ACCURATELY	CONCISELY &		
	STATES TITLE	ACCURATELY		1
		STATES TITLE		
	5 points	4 points	3 points	2 points
PURPOSE	CLEARLY,	ALMOST	VAGUELY	DOES NOT
	CONCISELY &	CLEARLY,	STATES	STATE
	ACCURATELY	CONCISELY &	PURPOSE	PURPOSE
	STATES	ACCURATELY	. 0.44 0.22	
	PURPOSE	STATES		
	I OKI OBE	PURPOSE		
	İ <b></b> .		3 points	2 points
	5 points	4 points ALMOST	VAGUELY	DOES NOT
HYPOTHESIS:	CLEARLY,			
A STATEMENT TO BE TESTED AS TO	CONCISELY &	CLEARLY,	STATES	STATE
VERACITY.	ACCURATELY	CONCISELY &	HYPOTHESIS.	HYPOTHESIS.
	STATES	ACCURATELY		
	HYPOTHESIS.	STATES		
	1	HYPOTHESIS.		1
	5 points	4 points	3 points	2 points
INDEPENDENT and DEPENDENT	COMPLETELY	STATES	STATES	STATES
VARIABLE(S)	STATES	99%-75% OF	74%-50% OF	<50% OF
	INDEPENDENT	INDEPENDENT	INDEPENDENT	INDEPENDENT
	and DEPENDENT	and DEPENDENT	and DEPENDENT	and DEPENDENT
	VARIABLE(S)	VARIABLE(S)	VARIABLE(S)	VARIABLE(S)
	VIII (2)	(3)	111011111111111111111111111111111111111	(1)
	5 points	4 points	3 points	2 points
INTRODUCTION/PRACTICAL	CLEAR CONCISE	CLEAR	POOR	POOR
	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND
IMPLICATIONS	AND	AND POOR	AND POOR	AND NO
				1
41	PRACTICAL	PRACTICAL	PRACTICAL	PRACTICAL
	IMPLICATIONS	IMPLICATIONS	IMPLICATIONS	IMPLICATIONS
	GIVEN			GIVEN.
	5 points		l	1
		4 points	3 points	2 points
ANALYSES:	COMPLETELY	STATES	STATES	STATES
Explains data, trends, & error	STATES	99%-75% OF	74%-50% OF	<50% OF
* * *	ANALYSES	ANALYSES	ANALYSES	ANALYSES
	5 points	4 points	3 points	2 points
CONCLUSION:	COMPLETELY	STATES	STATES	STATES
Restates the hypothesis, rejects	STATES	99%-75% OF	74%-50% OF	<50% OF
or accepts it. & uses data for support	CONCLUSION	CONCLUSION	CONCLUSION	CONCLUSION
ar manakan sal an mana mana sas ambhavs				
	5 points	4 points	3 points	2 points
MECHANICS	SENTENCES &/or		SENTENCES &/or	
MECHANICS	STATEMENTS	STATEMENTS	STATEMENTS	STATEMENTS
	ARE CONCISE,	ARE 80% AS TO	ARE 60% AS TO	ARE 20% AS TO
	WELL WRITTEN,		BEING CONCISE,	
	VERY LEGIBLE,	WELL WRITTEN,		
	ACCURATE	VERY LEGIBLE,	VERY LEGIBLE,	VERY LEGIBLE,
1		ACCURATE	ACCURATE	ACCURATE
	1.	4 points	3 points	2 points
	5 points			
		<del> </del>		
GRAMMAR/SPELLING	NO MISTAKES	≤2 MISTAKES	3-5 MISTAKES	>5 MISTAKES
	5 points	4 points	3 points	2 points
PERFORMANCE:	Great with no	Great with a	Good with a few	Bad with many
How well was the exercise done?	mistakes.	couple mistakes.	mistakes.	mistakes
	5 points	4 points	3 points	2 points

## General Chemistry Course Missions, Goals and Learning Outcomes:

Our mission is to provide students with core knowledge in basic sciences so they can become successful as Parker students, on board exams, in treating patients, and eventually becoming chiropractors and leaders in the field of wellness.

#### Course Goals:

- Students will have a better appreciation of chemistry and how it is related to other biological sciences
- 2. Students will appreciate the complexity of chemistry and its role in everyday life

#### General Chemistry | Topics Outline

- 1. Chapter 1: Matter, Measurements and Problem Solving
  - a. Atoms and Molecules
  - b. Classification of matter
  - c. Units of measurement
  - d. Significant numbers
- 2. Chapter 2: Atoms and Elements
  - a. Atomic theory and laws
  - b. Protons, neutrons and electrons
  - c. Atomic mass
- 3. Chapter 3: Molecules, Compounds and Chemical Equations
  - a. Chemical bonds
  - b. Chemical formulas
  - c. lonic naming
  - d. Moiecular naming
  - e. Chemical composition
  - f. Chemical formula
  - g. Balancing equations
- 4. Chapter 4: Chemical quantities and Aqueous Reactions
  - a. Stoichiometry
  - b. Limiting reactant
  - c. %Yield
  - d. Molarity
  - e. Types of chemical reactions

- 5. Chapter 5: Gases
  - a. Gas Laws
  - b. Ideal Gas law
  - c. Partial Pressure
- 6. Chapter 6: Thermochemistry
  - a. Enthalpy
  - b. Heat and work
  - c. Energy
  - d. Calorimetry
- 7. Chapter 7: Quantom Mechanics
  - a. Light Nature
  - b. Matter nature
  - c. Energy of hydrogen atom
  - d. Orbital shapes
- 8. Chapter 8: Periodic Properties
  - a. Electron configurations
  - b. Valence Electrons
  - c. Periodic trends
- 9. Chapter 9: Lewis Theory
  - a. Chemical bonds
  - b. Lewis dot structures
  - c. Bond energies and lengths
- 10. Chapter 10: Molecular Geometry

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### **Testing**

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## RUBRICS FOR LAB REPORTS

TLE	CLEARLY,	ALMOST	VAGUELY	DOES NOT
LDE	CONCISELY &	CLEARLY,	STATES TITLE	STATE TITLE
	ACCURATELY	CONCISELY &		
	STATES TITLE	ACCURATELY		
		STATES TITLE		
	5 points	4 points	3 points	2 points
JRPOSE	CLEARLY,	ALMOST	VAGUELY	DOES NOT
AL OBE	CONCISELY &	CLEARLY,	STATES	STATE
	ACCURATELY	CONCISELY &	PURPOSE	PURPOSE
	STATES	ACCURATELY		
	PURPOSE	STATES		
		PURPOSE		
	5 points	4 points	3 points	2 points
YPOTHESIS:	CLEARLY,	ALMOST	VAGUELY	DOES NOT
STATEMENT TO BE TESTED AS TO	CONCISELY &	CLEARLY,	STATES	STATE
ERACITY.	ACCURATELY	CONCISELY &	HYPOTHESIS.	HYPOTHESIS.
BRACIII.	STATES	ACCURATELY		
	HYPOTHESIS.	STATES	12	
		HYPOTHESIS.		•
	5 points	4 points	3 points	2 points
NDEPENDENT and DEPENDENT	COMPLETELY	STATES	STATES	STATES
ARIABLE(S)	STATES	99%-75% OF	74%-50% OF	<50% OF
CHARLES CONTRACTOR CON	INDEPENDENT	INDEPENDENT	INDEPENDENT	INDEPENDENT
	and DEPENDENT	and DEPENDENT	and DEPENDENT	and DEPENDENT
	VARIABLE(S)	VARIABLE(S)	VARIABLE(S)	VARIABLE(S)
	VIII. III. III. (D)	(0)	,	
	5 points	4 points	3 points	2 points
NTRODUCTION/PRACTICAL	CLEAR CONCISE		POOR	POOR
MPLICATIONS	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND
MI LICATIONS	AND	AND POOR	AND POOR	AND NO
	PRACTICAL	PRACTICAL	PRACTICAL	PRACTICAL
	IMPLICATIONS	IMPLICATIONS	IMPLICATIONS	IMPLICATIONS
	GIVEN	21		GIVEN.
	5 points			•
		4 points	3 points	2 points
NALYSES:	COMPLETELY	STATES	STATES	STATES
Explains data, trends, & error	STATES	99%-75% OF	74%-50% OF	<50% OF
Apianis nata, trends, de error	ANALYSES	ANALYSES	ANALYSES	ANALYSES
				}
₩	5 points	4 points	3 points	2 points
CONCLUSION:	COMPLETELY	STATES	STATES	STATES
Restates the hypothesis, rejects	STATES	99%-75% OF	74%-50% OF	<50% OF
er accepts it, & uses data for support	CONCLUSION	CONCLUSION	CONCLUSION	CONCLUSION
	5 points	4 points	3 points	2 points
MECHANICS	SENTENCES &/or	SENTENCES &/or	SENTENCES &/or	SENTENCES &/o
MECHANICS	SENTENCES &/or STATEMENTS	SENTENCES &/or STATEMENTS	SENTENCES &/or STATEMENTS	SENTENCES &/o STATEMENTS
MECHANICS	SENTENCES &/or STATEMENTS ARE CONCISE,	SENTENCES &/or STATEMENTS ARE 80% AS TO	SENTENCES &/or STATEMENTS ARE 60% AS TO	SENTENCES &/o STATEMENTS ARE 20% AS TO
	SENTENCES &/or STATEMENTS ARE CONCISE, WELL WRITTEN,	SENTENCES &/or STATEMENTS ARE 80% AS TO BEING CONCISE,	SENTENCES &/or STATEMENTS ARE 60% AS TO BEING CONCISE,	SENTENCES &/o STATEMENTS ARE 20% AS TO BEING CONCISE
	SENTENCES &/or STATEMENTS ARE CONCISE, WELL WRITTEN, VERY LEGIBLE,	SENTENCES &/or STATEMENTS ARE 80% AS TO BEING CONCISE, WELL WRITTEN,	SENTENCES &/or STATEMENTS ARE 60% AS TO BEING CONCISE, WELL WRITTEN,	SENTENCES &/o STATEMENTS ARE 20% AS TO BEING CONCISE WELL WRITTEN
	SENTENCES &/or STATEMENTS ARE CONCISE, WELL WRITTEN,	SENTENCES &/or STATEMENTS ARE 80% AS TO BEING CONCISE, WELL WRITTEN, VERY LEGIBLE,	SENTENCES &/or STATEMENTS ARE 60% AS TO BEING CONCISE, WELL WRITTEN, VERY LEGIBLE,	SENTENCES &/o STATEMENTS ARE 20% AS TO BEING CONCISE WELL WRITTEN VERY LEGIBLE,
	SENTENCES &/or STATEMENTS ARE CONCISE, WELL WRITTEN, VERY LEGIBLE,	SENTENCES &/or STATEMENTS ARE 80% AS TO BEING CONCISE, WELL WRITTEN, VERY LEGIBLE, ACCURATE	SENTENCES &/or STATEMENTS ARE 60% AS TO BEING CONCISE, WELL WRITTEN, VERY LEGIBLE, ACCURATE	SENTENCES &/o STATEMENTS ARE 20% AS TO BEING CONCISE WELL WRITTEN VERY LEGIBLE, ACCURATE
	SENTENCES &/or STATEMENTS ARE CONCISE, WELL WRITTEN, VERY LEGIBLE, ACCURATE	SENTENCES &/or STATEMENTS ARE 80% AS TO BEING CONCISE, WELL WRITTEN, VERY LEGIBLE,	SENTENCES &/or STATEMENTS ARE 60% AS TO BEING CONCISE, WELL WRITTEN, VERY LEGIBLE,	SENTENCES &/c STATEMENTS ARE 20% AS TO BEING CONCISI WELL WRITTEN VERY LEGIBLE
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	SENTENCES &/or STATEMENTS ARE CONCISE, WELL WRITTEN, VERY LEGIBLE, ACCURATE	SENTENCES &/or STATEMENTS ARE 80% AS TO BEING CONCISE, WELL WRITTEN, VERY LEGIBLE, ACCURATE 4 points	SENTENCES &/or STATEMENTS ARE 60% AS TO BEING CONCISE, WELL WRITTEN, VERY LEGIBLE, ACCURATE 3 points	SENTENCES &/c STATEMENTS ARE 20% AS TO BEING CONCISE WELL WRITTEN VERY LEGIBLE, ACCURATE 2 points
	SENTENCES &/or STATEMENTS ARE CONCISE, WELL WRITTEN, VERY LEGIBLE, ACCURATE  5 points  NO MISTAKES	SENTENCES &/or STATEMENTS ARE 80% AS TO BEING CONCISE, WELL WRITTEN, VERY LEGIBLE, ACCURATE 4 points  \$\leq\$ 2 MISTAKES	SENTENCES &/or STATEMENTS ARE 60% AS TO BEING CONCISE, WELL WRITTEN, VERY LEGIBLE, ACCURATE 3 points	SENTENCES &/o STATEMENTS ARE 20% AS TO BEING CONCISE WELL WRITTEN VERY LEGIBLE, ACCURATE 2 points
GRAMMAR/SPELLING	SENTENCES &/or STATEMENTS ARE CONCISE, WELL WRITTEN, VERY LEGIBLE, ACCURATE  5 points  NO MISTAKES 5 points	SENTENCES &/or STATEMENTS ARE 80% AS TO BEING CONCISE, WELL WRITTEN, VERY LEGIBLE, ACCURATE 4 points   \$\leq\$ 2 MISTAKES 4 points	SENTENCES &/or STATEMENTS ARE 60% AS TO BEING CONCISE, WELL WRITTEN, VERY LEGIBLE, ACCURATE 3 points	SENTENCES &/o STATEMENTS ARE 20% AS TO BEING CONCISE WELL WRITTEN VERY LEGIBLE, ACCURATE 2 points  >5 MISTAKES 2 points
	SENTENCES &/or STATEMENTS ARE CONCISE, WELL WRITTEN, VERY LEGIBLE, ACCURATE  5 points  NO MISTAKES	SENTENCES &/or STATEMENTS ARE 80% AS TO BEING CONCISE, WELL WRITTEN, VERY LEGIBLE, ACCURATE 4 points  \$\leq\$ 2 MISTAKES	SENTENCES &/or STATEMENTS ARE 60% AS TO BEING CONCISE, WELL WRITTEN, VERY LEGIBLE, ACCURATE 3 points	SENTENCES &/o STATEMENTS ARE 20% AS TO BEING CONCISE WELL WRITTEN VERY LEGIBLE, ACCURATE 2 points  >5 MISTAKES

# General Chemistry Course Missions, Goals and Learning Outcomes:

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I, am aware of all the
safety rules and procedures, presented by the
instructor, and will obey each one. In addition, I
know that lab goggles and a lab coat are
required for each lab period and failure to bring
these to the lab will result in a zero and an
unexcused absence.
Student's Signature
Date

		4.8
	;;	