

# CHEMISTRY 109 SYLLABUS

SPRING 2005

Course ID: CHEM-109-002 (4 hours of credit) Call Number = 02159

Credits: 4 hours \*\* This course will have one-third more material than a 3 Credit Course!

Time: 8:40 am to 10:45 am Tuesdays and Thursdays (no classes on Fridays!)

Class Room: TCCW # 403

Instructor: Mr. Larry Clay Byrd E-Mail: larry.byrd@wku.edu

Office: TCNW 323 (WKU)

WKU Phone: 270 - 745-6018 I have voice-mail so you can leave me a message.

Home Phone: [ 7:00 PM to 9:00 PM ] : 270- 781-2954

Textbook: Chemistry and Life Prentice Hall Publishing Company [ Sixth Edition]

By: John Hall, Stuart Baum and Rhonda Ennis

**Chemistry Handout Fee [ Required ]: \$ 8.00 Many Notes !!!**

## IMPORTANT DATES:

1. January 18 ( Tuesday ) : LAST DAY to drop a course WITHOUT ANY GRADE!  
LAST DAY to change from AUDIT TO CREDIT!
2. January 17 ( Monday ) : NO CLASSES !!!!!
3. March 01 ( Tuesday ) : LAST DAY to drop a course with a W!  
LAST DAY to change from CREDIT TO AUDIT!
4. March 21 ( Monday ) to March 25 ( Friday ) : SPRING BREAK !!!!!!!!!
5. May 02 ( Monday ) to May 06 ( Friday ) : FINAL EXAM DAYS !!!

## NOTES:

1. You will need a calculator that will add, subtract, multiply, and divide.
2. TV-Tapes Programs: There is one TV-VHS Tape in the Helm Library that you might want to use. Ask at the front desk for the BYRD Chem. 109 TV-Tape. The ONE TAPE contains all the following math review materials: Scientific Notation , Temperature Conversions , Factor-Label-Method and a low level review of Basic Algebra needed in this course. USE IT !!!!
3. HOUR TESTS: 80 % of your Final Grade in this course !!
  - A. HOUR TEST I : February 01 ( Tuesday )
  - B. HOUR TEST II : February 24 ( Thursday )
  - C. HOUR TEST III : March 16 ( Wednesday ) From 6:00 pm to 8:00 pm in 330 TCNW  
NIGHT EXAM ---- TWO CLASSES COMBINED
  - D. HOUR TEST IV : On the day of the FINAL EXAM!  
10:30 AM to 12:30 on May 03 ( Tuesday )

# CLASS MEETINGS

SPRING 2005

WEEK	TUESDAYS	THURSDAYS
1	January 11	January 13
2	January 18	January 20
3	January 25	January 27
4	February 01 [ HOUR TEST I ]	February 03
5	February 08	February 10
6	February 15	February 17
7. II ]	February 22	February 24 [ Hour Test
8.	March 01*****	March 03

**\*\*\* If you need to drop, then you MUST DROP by March 01 (Tuesday) since this is the LAST DAY for a W !!!!!!!**

MIDTERM	MIDTERM
9	March 08
10	March 15
	March 17 [ No Class ! ]

**HOUR TEST III will be given at night on March 16 from 6:00 pm to 8:00 pm in room 330 TCNW**

11	March 21 ( Monday ) to March 25 ( Friday ) : SPRING BREAK !!!
12	March 29
13	March 31
14	April 05
15	April 07
16	April 12
	April 14
	April 19
	April 21
	April 26
	April 28

**17 Final Exam Week : Your HOUR TEST IV : May 03 ( Tuesday ) : 10: 30 am to 12:30pm**

**OUTLINE FOR CHEMISTRY FOR THE HEALTH SCIENCES  
(CHEMISTRY 109)  
SPRING 2005**

**Chemistry 109 is mainly an Introduction to General Chemistry, but it also includes an Introduction to Organic and Biochemistry**

**Credits: 4 semester hours**

**1 hour-and-50 minute meetings: 30-31 per semester**

**Textbook: Chemistry and Life Prentice Hall Publishing Company [ Sixth Edition]  
By: John Hall, Stuart Baum and Rhonda Ennis**

Topics	Meetings
<b>1. Matter and Energy</b>	<b>2</b>
<b>2. Metric System, Scientific Notation, Factor-Label Method, Temperature, Density, and Significant Figures</b>	<b>4</b>
<b>3. Atomic Structure</b>	<b>1</b>
<b>4. Electron Structure of the Atom</b>	<b>3</b>
<b>5. Ionic Bonding, Polyatomic Ions, Names and Formulas of Ionic Compounds, and Formula Weight</b>	<b>4</b>
<b>6. Covalent Compounds, Dot Structures, Dash Structures, Coordinate Covalent Bonds, Polar Bonds, and Naming of Covalent Compounds</b>	<b>4</b>
<b>7. Relative Weights, Mole-Gram Conversions, and Meaning of Balanced Equations</b>	<b>2</b>
<b>8. Characteristics of Gases, Dalton's Law, Boyle's Law, and Charles' Law</b>	<b>1</b>
<b>9. Characteristics of Solutions, Electrolytes, Equilibrium, Percentage Weight/Volume, Percentage Volume/Volume, Dilution, Suspensions, and Dialysis</b>	<b>2</b>
<b>10. Acids, Bases, pH, and Blood Buffers</b>	<b>2</b>
<b>11. Introduction to Organic Chemistry and Biochemistry</b>	<b>5</b>

**CHEMISTRY 109**  
**OTHER GENERAL INFORMATION**  
**SPRING 2005**

**I. MR. LARRY BYRD - OFFICE HOURS:**

1. Monday: 11:15 to 11:45 1:30 to 3:30
2. Tuesday: 11:15 to 11:45
3. Wednesday: 11:15 to 11:45 ; 1:30 to 3:30
3. Thursday: 11:15 to 11:45 ; 1:30 to 3:30
4. Friday by Appointments
5. Others Days and Hours by Appointments \*\*\*\*\*

**II. PURPOSE OF CHEMISTRY FOR THE HEALTH SCIENCES:**

This course is designed to emphasize the practical aspects of inorganic, organic and biochemistry as related to human health. The course is offered specifically for students in the allied health programs, but is also recommended for students in physical education, recreation, institution administration, and health and safety. Also, this course may be used by any student to satisfy general education requirements.

**III. PREREQUISITES:** None. But a course in High School Chemistry sure helps.

**IV. CLASS ATTENDANCE:**

Registration in a course obligates the student to be regular and punctual in class attendance.

If I believe that **EXCESSIVE ABSENTEEISM** is contributing to the poor academic achievement of a student, I will request that the academic counseling and detention personnel in the Office of the Dean of Student Life arrange a counseling session with the student. After such counseling, continued excessive absenteeism may result in dismissal from my class with a failing grade!!

**\*\* ALSO SEE OTHER PAGES** about attendance on other part of syllabus.

**V. STATEMENT OF COMPLIANCE :**

Western Kentucky University is committed to equal opportunity in its educational programs.

Students with disabilities who require accommodations (academic adjustments and/or auxiliary aids or services) for this course must contact the Office for Student Disability Services, Garret Conference Center room 101.

The OFSDS telephone number is (270)745-5004 V/TDD.

Please **DO NOT** request accommodations directly from the instructor without a letter of accommodation from the Office for Student Disability Services.

## **Absenteeism/Tardiest**

**If you are late or absent from this class,  
your grade will suffer.**

**If you miss this class, you must turn in to me a signed note  
stating why you missed. If medical, death or WKU sponsored  
trip, you must supply proof.**

**It is your responsibility to find out from other students what  
was covered during your absence. Look around and learn at  
least two other students in your class. Get from them their  
phone numbers and/or E-mail addresses.**

**Late to class is equal to minus 0.5 points off  
YOUR TOTAL POINTS UP TO HOUR TEST IV!!!!**

**EACH ONE absence, that is not excused by me, will  
result in 2.0 points per Absence off  
YOUR TOTAL POINTS UP TO HOUR TEST IV!!!!**

**YOU Could Easily lose a FULL Letter Grade OFF !!!!**

**Thus, if you lose 6 points off your TOTAL AVERAGE up to Hour  
Test IV, that is over a half-a-letter grade.**

**If you have an 8:45 am class, you should plan to park in the  
Chestnut Lot.**

**HOWEVER, you must arrive by 7:15 am to find a parking place.**

**I will be in my office before class Starts and if you**

**need help, see me before class!!!**

## **CHEMISTRY 109**

### **GENERAL GRADE INFORMATION**

#### **I. HOUR TESTS, IN-CLASS- QUIZZES AND HOMEWORK-QUIZZES**

- A. IN-CLASS -QUIZZES and HOMEWORK-QUIZZES will be graded and recorded as specific Quizzes:**

**In - CLASS - Quizzes and HOMEWORK - Quizzes:**

**At least 10 TOTAL will be given during the semester!!!**

**Drop the one lowest grade up to midterm and then drop the one lowest grade after midterm. If you miss on a day an In-CLASS-Quiz or you miss on a day that a HOMEWORK- Quiz is due, then a grade of ZERO will be recorded for that missed material. There will be NO MAKE-UPS. The ZERO will be one of your Quizzes that will be dropped.**

**YOU must NOT MISS THIS CLASS!!!!!!**

- B. HOUR TESTS: Four (see first page)**

#### **II. FINAL LETTER GRADE IN CHEMISTRY 109 :**

<b>TESTS and QUIZZES</b>	<b>% OF FINAL GRADE</b>
<b>A. QUIZ AVERAGE UP TO MIDTERM</b>	<b>10.0%</b>
<b>B. HOUR TEST I</b>	<b>20.0%</b>
<b>C. HOUR TEST II</b>	<b>20.0%</b>
<b>D. QUIZ AVERAGE AFTER MIDTERM</b>	<b>10.0%</b>
<b>E. HOUR TEST III</b>	<b>20.0%</b>
<b>F. HOUR TEST IV</b>	<b>20.0%</b>

#### **III. GRADING SCALE: A = 90 -100 ; B= 80 - 89; C= 70- 79; D= 60- 69; F= "BELOW" 60**

#### **IV. ABSENCES:**

- A. If you miss on a day a Quiz is given or a Homework-Quiz is taken up, a grade of ZERO will be recorded.  
There will be no make-ups. This zero will be one of yours that will be dropped.**
- B. Homework "Usually CAN NOT" be turned in late. You will receive a zero and it will be**

your drop,

- C. **Hour Tests:** If missed, a make-up exam "may" be given if an extremely good excuse is given. It is the "STUDENT'S RESPONSIBILITY" to check with the instructor if an exam is "MISSED."

GRADE IN CHEMISTRY: CHEM 109  
 TEACHER: PROFESSOR LARRY BYRD  
 CLASS TIME AND DAYS: 8:45 am to 10:45 am TTH  
 SEMESTER: SPRING 2005

PRINT : LAST NAME, FIRST  
TODAY'S DATE:

## GRADE SHEET FOR FIRST HALF OF THE SEMESTER

### I. HOUR TEST I :

A. TRUE RAW SCORE on HOUR TEST I : [ What you made on the Test ] : \_\_\_\_\_

B. EXTRA CREDIT for HOUR TEST I : \_\_\_\_\_

C. YOUR TOTAL SCORE on HOUR TEST I : [ Add IA + IB = IC ] : \_\_\_\_\_

D. YOUR POINTS ON HOUR TEST I : [ 0.200 (20.0%) TIMES IC ] : \_\_\_\_\_

[ round answer off to the nearest  $\pm 0.1$  ] [ possible 20.0 POINTS ON HOUR TEST I ]  
 [ round off to the nearest  $\pm 0.1$  ] [ possible 20.0 POINTS ON HOUR TEST I ]

### II. QUIZZES UP TO MIDTERM:

A. GRADES ON EACH QUIZ UP TO MIDTERM:

1. \_\_\_\_\_ 4. \_\_\_\_\_ 7. \_\_\_\_\_ 10. \_\_\_\_\_ 13. \_\_\_\_\_ 16. \_\_\_\_\_ 19. \_\_\_\_\_

2. \_\_\_\_\_ 5. \_\_\_\_\_ 8. \_\_\_\_\_ 11. \_\_\_\_\_ 14. \_\_\_\_\_ 17. \_\_\_\_\_ 20. \_\_\_\_\_

3. \_\_\_\_\_ 6. \_\_\_\_\_ 9. \_\_\_\_\_ 12. \_\_\_\_\_ 15. \_\_\_\_\_ 18. \_\_\_\_\_ 21. \_\_\_\_\_

B. AVERAGE GRADE on the BEST QUIZZES UP TO MIDTERM :

[ Drop the one lowest; find average and then round off to the nearest  $\pm 0.1$  ] [ possible 100.0% ]

C. YOUR POINTS ON QUIZZES UP TO MIDTERM :

[ multiply IIB times 0.100 (10.0%) ] [ round off to the nearest  $\pm 0.1$ ] [ possible 10.0 points on QUIZZES UP TO MIDTERM ]

### III. HOUR TEST II :

A. TRUE RAW SCORE on HOUR TEST II : [ What you made on the Test ] : \_\_\_\_\_

B. EXTRA CREDIT for HOUR TEST II : \_\_\_\_\_

C. YOUR TOTAL SCORE on HOUR TEST II : [ Add IIIA + IIIB = IIIC ] : \_\_\_\_\_

D. YOUR POINTS ON HOUR TEST II : [ 0.200 (20.0%) TIMES IIIC ] : \_\_\_\_\_

[ round answer off to the nearest  $\pm 0.1$  ] [ possible 20.0 POINTS ON HOUR TEST II ]

### IV. YOUR TOTAL POINTS UP TO MIDTERM:

:

[ To find your total points add ID + IIC + IID = IV ]  
midterm ]

[ There are 50.0 points possible up to

V. YOUR AVERAGE UP TO MIDTERM: \_\_\_\_\_

: \_\_\_\_\_  
[To find your average divide IV by 50.0 and then multiply by 100.0%] [There is a possibility of 100.0 % average up to  
midterm]

[Be sure to round off to the nearest  $\pm 0.1\%$ ]

VI. YOUR LETTER GRADE UP TO MIDTERM: \_\_\_\_\_

: \_\_\_\_\_  
[Find your V-section AVERAGE on Grade Scale below:

A > 89.4%; B > 79.4%; C > 69.4%; D > 59.4%; F = below 59.5% ]

BYRD: CHEM109\ 2005 \ M-NewGSheet-109TTh.SP5

GRADE IN CHEMISTRY: CHEM 109

TEACHER: PROFESSOR LARRY BYRD

PRINT : LAST NAME, FIRST

PRINT : LAST NAME, FIRST

TODAY'S DATE: \_\_\_\_\_

CLASS TIME AND DAYS: 8:45 am to 10:45 am TTh

SEMESTER: SPRING 2005

## GRADE SHEET FOR AFTER MIDTERM

IV. YOUR TOTAL POINTS UP TO MIDTERM : [ same as IV on page one ] : \_\_\_\_\_

VII. HOUR TEST III :

A. TRUE RAW SCORE on HOUR TEST III : [ What you made on the Test ] : \_\_\_\_\_

B. EXTRA CREDIT for HOUR TEST III : \_\_\_\_\_

C. YOUR TOTAL SCORE on HOUR TEST III : [ Add VIIA + VIIB = VIIC ] : \_\_\_\_\_

D. YOUR POINTS ON HOUR TEST III [ 0.200 (20.0%) TIMES VIIC ] : \_\_\_\_\_  
[ round answer off to the nearest  $\pm 0.1$  ] [ possible 20.0 POINTS ON HOUR TEST III ]

VIII. YOUR TOTAL POINTS (AT THIS POINT) AFTER HOUR TEST III :

[ Add IV + VIID = VIII ]

[ 70.0 points possible ]

IX. QUIZZES AFTER MIDTERM :

A. Grades on each QUIZ AFTER MIDTERM :

1. \_\_\_\_\_ 4. \_\_\_\_\_ 7. \_\_\_\_\_ 10. \_\_\_\_\_ 13. \_\_\_\_\_ 16. \_\_\_\_\_ 19. \_\_\_\_\_  
2. \_\_\_\_\_ 5. \_\_\_\_\_ 8. \_\_\_\_\_ 11. \_\_\_\_\_ 14. \_\_\_\_\_ 17. \_\_\_\_\_ 20. \_\_\_\_\_  
3. \_\_\_\_\_ 6. \_\_\_\_\_ 9. \_\_\_\_\_ 12. \_\_\_\_\_ 15. \_\_\_\_\_ 18. \_\_\_\_\_ 21. \_\_\_\_\_

B. AVERAGE GRADE on the BEST QUIZZES AFTER MIDTERM:

[ Drop the one lowest ; find average and then round off to the nearest  $\pm 0.1\%$  ]

[ possible 100.0% ]

C. YOUR POINTS on QUIZZES AFTER MIDTERM :

[ multiply IXB times 0.100 (10.0%) ] [ round off to nearest  $\pm 0.1$  ]

[ possible 10.0 points on QUIZZES after

MIDTERM ] \_\_\_\_\_

X. YOUR TOTAL POINTS UP TO HOUR TEST IV : \_\_\_\_\_

[ ADD VIII + IXC = X ]

[ possible 80.0 points ] \_\_\_\_\_

XI. EXTRA CREDIT: OR LOSS OF POINTS Because of Tardiest or Absenteeism  
OFF YOUR TOTAL POINTS UP TO HOUR TEST IV : \_\_\_\_\_



: \_\_\_\_\_

**XII. THE TRUE RAW SCORE YOU must make on HOUR TEST IV to receive an A, B, C or D in this course!!!** [ FIRST, for an A, subtract X section above from 90 and then divide by 0.20 ] For B, 80 then as above. For C, 70. For D, 60  
 Finally, subtract XI Section above, from your calculated value! ]

A= \_\_\_\_\_  
 B= \_\_\_\_\_  
 C= \_\_\_\_\_  
 D= \_\_\_\_\_

**XIII. HOUR TEST IV:**

**A. TRUE RAW SCORE on HOUR TEST IV :** [ What you made on the Test ] :

\_\_\_\_\_

**B. EXTRA CREDIT for HOUR TEST IV :** [ Same as XI ] : \_\_\_\_\_

**C. YOUR TOTAL SCORE on HOUR TEST IV :** [ Add XIII A + XIII B = XIII C ] : \_\_\_\_\_

**D. YOUR POINTS ON HOUR TEST IV :** [ 0.200 (20.0%) TIMES XIII C ] : \_\_\_\_\_  
 [round answer off to the nearest  $\pm 0.1$ ] [ possible 20.0 POINTS ON HOUR TEST

IV ] \_\_\_\_\_

**XIV. YOUR TOTAL POINTS IN CHEMISTRY 109 :**

[ Add X + XIID = XIV ]

\_\_\_\_\_ [ possible 100.0 points ] \_\_\_\_\_

**XV. YOUR LETTER GRADE IN CHEMISTRY 109 :**

[ Find your XIV (TOTAL POINTS IN CHEMISTRY) on Grade Scale below:

A > 89.4 pts; B > 79.4 pts; C > 69.4 pts; D > 59.4 pts; F = below 59.5 pts]