CHM 103-01 Fall 2004
University of Detroit Mercy
Department of Chemistry and Biochemistry
CHEMISTRY AND SOCIETY
CSI: DETROIT – FORENSIC CHEMISTRY
Room 114 Chemistry (C114)
Lecture: 9-9:50 AM M-W-F

COURSE INFORMATION

Instructor:
Prof. Matthew J. Mio
Office: Room 215A Chemistry (C215A)
Phone: 313.993.1188
E-mail: miomj@udmercy.edu
Office Hours: 12 – 1 PM M-T-W-R-F or anytime by appointment

Prerequisites: None.

Course Description: A course designed for non-science majors with no previous college-level science background. The course includes an introduction to chemistry as well as several current chemical topics of significant societal concern.

Course Objectives: Students will learn how to apply general chemical concepts in forensic analysis. In a larger sense, students will be expected to exercise logic, attention to detail, memorization and critical thinking in the solving of forensic chemical problems.

Course Outcomes: Upon successful completion of this course, students will be able -
1. To communicate in the conventions and nomenclature of chemistry.
2. To understand the foundational concepts of inorganic, organic, analytical, physical and biochemistry.
3. To apply the qualitative and quantitative methods of chemistry.
4. To rationalize the significance of the science of chemistry with regard to forensic analysis.

Primary Resources: Saferstein, R. *Criminalistics – An Introduction to Forensic Science, 8th ed.;* Pearson Prentice-Hall: Upper Saddle River, NJ 2004. (required) Handouts. (supplied by Prof. Mio)

Course Outline: *Readings in Saferstein must be completed prior to class.*

Monday	Wednesday	Friday
6 Sept. – **LABOR DAY**	8 Sept. – Ch. 1	9 Sept. – Quiz #1
13 Sept. – Ch. 2-3	15 Sept. – Ch. 4	17 Sept. – Quiz #2
20 Sept. – Ch. 5	22 Sept. – Ch. 5	24 Sept. – Quiz #3
27 Sept. – Ch. 6	29 Sept. – Ch. 6	1 Oct. – Quiz #4
4 Oct. – Ch. 6	6 Oct. – Ch. 7	8 Oct. – Quiz #5
11 Oct. – Ch. 8	13 Oct. – Ch. 8	15 Oct. – Quiz #6
18 Oct. – Ch. 8	20 Oct. – Quiz #7	22 Oct. – **NO LECTURE**
25 Oct. – Ch. 9	27 Oct. – Ch. 9	29 Oct. – Quiz #8
1 Nov. – Ch. 10	3 Nov. – Ch. 10	4 Nov. – Quiz #9
8 Nov. – Ch. 11	10 Nov. – Ch. 11	12 Nov. – Quiz #10
15 Nov. – Ch. 11	17 Nov. – Ch. 11	19 Nov. – Quiz #11
22 Nov. – Ch. 12	24 Nov. – Ch. 12	26 Nov. – **THANKSGIVING**

29 Nov. – Ch. 13	1 Dec. – Ch. 14	3 Dec. – Quiz #12
6 Dec. – REVIEW	8 Dec. – REVIEW	10 Dec. – REVIEW
13 Dec.	15 Dec. – **FINAL EXAM**	17 Dec.

Grading:

I. Quizzes – 50 pts × 12 = 600 pts total
- A. Questions will number 4-5 per Quiz (short answers, simple calculations)
- B. Given in first 30 min of lecture on **Fridays (except Wednesday 20 October)**
- C. Quizzes will be closed book/notes and based on lecture notes, speakers
- D. One challenge problem will be given on each Quiz; points earned will be added to student's bonus point bank

II. Speaker Reviews – 30 pts × 6 = 180 pts total
- A. After each speaker heard in class, students will write a two-page report
- B. First page gives an account of the speaker's topic
- C. Second page relates the speaker's topic to chemistry and chemical principles

III. Attendance Quiz – 100 pts banked; 2 pts × 10 = 20 bonus pts total possible
- A. Quizzes will occur at random times and have a length of 5 min
- B. Each quiz will have two multiple choice problems
- C. Each student receives 100 points to begin the term
- D. Miss any three quizzes and you lose 100 points
- E. Points earned on a quiz are added to the student's bonus point bank

IV. Final Exam – 120 × 1 = 120 pts total
- A. Will take place in C114 on **Wednesday 15 December at 8:30 AM**
- B. Comprehensive, but questions similar to Quizzes
- C. Students will have 110 min to complete the Final Exam
- D. Final Exam will be closed book and notes

V. Grading Scale (1000 pts possible) – A = 100-93%, A- = 92-90%, B+ = 89-88%, B = 87-83%, B- = 82-80%, C+ = 79-78%, C = 77-73%, C- = 72-70%, D = 69-60%, F = 60-0%

Study Requirements:

1. **Class will be held from 8:30-9:55 AM on Friday 1 October. There will be no lecture on Friday 22 October.**
2. Cell phone or pager activity during lecture, a quiz or the final exam period will result in the student being asked to leave class for that day or a zero.
3. With regard to attendance/turning in work: Early is on time. On time is late.
4. You will be expected to follow the assignment schedule given in the course outline above. Read the text prior to class and complete all example problems as assigned.
5. Plan a study schedule and adhere to it strictly. Careful, attentive, daily work is the route to success. Consult the grade sought/study habits table for more information.
6. Get help as often as you need it! At any given moment I am not lecturing, I am available between the hours of 6 AM - 4 PM, six days a week, in my office.
7. Students are expected to adhere to the highest standards of academic integrity. Cheating or plagiarism will not be tolerated. For further information, see the UDM Undergraduate Catalog or the Engineering and Science Student Handbook.