Chemistry 4100 Forensic Chemistry Fall 2013

Instructor: Dr. Stephanie A. Myers **Office Hours** TBA

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Objective: To learn skills relevant to Forensic Chemistry including interpretation and validation of data, basic toxicology (drugs and poisons), arson analysis and communication of results to nonscientists. If time permits, trace analysis will also be covered.

Materials: Forensic Chemistry; 2^{nd} edition by Suzanne Bell (yes, edition matters!); laboratory notebook with duplicate pages (one with used pages from a previous class is acceptable); safety glasses; calculator. Optional: The Does Makes the Poison, 3^{rd} edition by Patricia Frank and M. Alice Ottoboni.

Grading:

Tests: There will be two tests, worth 100 pts each and a comprehensive final exam, worth 150 points.

Labs: Labs will be worth 20-50 points depending on difficulty. All reports must be word processed. Graphs and data analysis should be completed with a spreadsheet. The style must follow guidelines described in *Style Guide for Chemistry Reports* by SA Myers and/or the *ACS Style Guide* edited by J. Dodd.

Response papers: Friday will be ethics day. Part of the class will be used to discuss some ethical issue related to forensic science. Some preview reading may be required. This will be posted on the course website. A short (0.5 - 1 page) paper responding to the discussion will be due on Mondays at the beginning of class.

Other assignments: There <u>will</u> be various other assignments. These will be given a point value at the time of the assignment. These will primarily consist of short reports on forensic science topics such as: poisons, illegal drugs, typical instrumental techniques, etc.

Your grade will be based on the percentage of points earned out of those possible: with 90% or greater an A; 89-80% a B; 79-70% a C; 69-60% a D; and less than 60% an F.

Attendance: You are expected to attend all classes and all lab sessions. If you miss a class, it is your responsibility to find out what material was covered and what announcements were made. Any student more than 15 minutes late for a lecture will be considered absent. You are also expected to attend lab regularly and on time. You may lose points if you are late. Absence from 2 labs is considered cause to drop a student from the course. Any student more than 15 minutes late to lab will be considered absent. With an acceptable excuse, you might be allowed to make up a lab, depending on the nature of the experiment conducted that week. You will receive a zero for any lab you do not attend.

Absence from 5 lectures and/or labs is considered cause to drop a student from this course. The instructor will only withdraw a student after midterm (10/14) with a grade of WF.

Lab Notebooks: You are expected to keep a lab notebook which contains *all* information and data relevant to your experiment. You will not be permitted in lab without your notebook. Duplicate pages of your lab work, including copies of any instrumental data must be turned in *before leaving lab*. Any information that cannot be validated by your lab notebook is not acceptable as part of a report.

Makeups: If you miss an exam or lab, you must contact me within 24 hours and schedule a make-up, which must be taken as soon as possible (normally within one week). If you are aware of the absence in advance, you must schedule a time to take the exam early. The grade will remain a zero until I receive documentation of your excuse. Documentation must be from an authority I recognize.

Late Penalties: There will be a 5 point per day late penalty on assignments. If assignment does not meet prescribed standards, it will be returned and the late penalty will be 5 points every day thereafter.