COURSE SYLLABUS, CHEM 4380 FORENSIC CHEMISTRY, 3 CREDIT HOURS

Course Information
- Darren L. Williams, Ph.D. (a.k.a. DW)
  - Office: CFS 317 G, Campus Box 2117, Huntsville, TX 77340
  - Contact (936)294-1529, williams@shsu.edu, http://www.shsu.edu/~chm_dlw/, and on FaceBook.
  - Office hours are 11 AM to noon MWF, 9:30 to 10:30 AM, TTh, and other times by appointment. Email is the preferred method for communication and for making appointments.
- Lecture will meet in CFS 102 on Tuesday and Thursday from 8 to 9:20 AM.

Required Textbook

Course Description
This is a one semester course focused on surveying important aspects of chemistry to forensic inquiries. Focus will be on the validity of results. Techniques and methods for selecting proper techniques to answer various questions will be discussed. Writing Enhanced. Prerequisite: A minimum grade of C in CHM 239, 440 and 467 (or concurrent enrollment in CHM 467); MTH 142. Spring. Credit 3.

Course Objectives
1. IDEA Objective #4: To develop specific skills, competencies, and points of view needed by professionals in the field.

Enabling Objectives
1. Studying the requirements of critical-quality analysis of drugs and physical evidence including accelerants, explosives, inks, paints, polymers, and fibers.
2. Following a data-generating process daily, charting its performance weekly, and reporting on its control periodically.
3. Writing a quality control report detailing the performance of a process over the semester.

Assessment
To determine the final course grade, the student’s numerical average will be compared to course requirements, to peer performance, and to the definitions set forth in the University Catalog (Scholastic Requirements). Specific grade cut-off values are not predetermined because of the semester-by-semester variation of exams, classes, hurricanes, and other circumstances.

TENTATIVE LETTER GRADES are provided as a service to the student for midterm grade evaluation. This will allow the student to make an informed decision related to the drop date in early May.
1. The 12th class day is the last day to drop with a full refund.
2. The last class day is the last day to withdraw from the course. (Scholastic Requirements).

Table 1: Weighting factors

<table>
<thead>
<tr>
<th>Items</th>
<th>Weight</th>
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<tbody>
<tr>
<td>In Class (Attendance, Preparation, and Participation)</td>
<td>5%</td>
</tr>
<tr>
<td>Outside of Class (Duration of Homework Exposure, Charting Discipline, Responsiveness)</td>
<td>10%</td>
</tr>
<tr>
<td>Report Writing Style and Process</td>
<td>10%</td>
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<tr>
<td>Exams (three, equally weighted)</td>
<td>75%</td>
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Exams
- Exams will be announced in class and on Blackboard.
- Exam questions will be very similar to the homework questions. About 10% of the exam will be from the A-level material posted on Blackboard.
- All exams will utilize the Scantron form 882-E. The exams will remain the property of SHSU as a record of student performance. The students are encouraged to visit with DW to see the key and to understand their strengths and weaknesses related to their exam performance.

Missed exams:
DW does not give make-up examinations. In the unfortunate case, where a student misses an exam, DW will discuss possible remedies with the student provided that all the following conditions are met:
1. The student was absent on the exam date.
2. The student telephoned in advance or left a voice mail message or email message alerting DW to their absence along with a description of why they will miss (have missed) the exam. (All information will be kept in strict confidence.)
DW reserves the right to modify the grading scheme such that the final exam may compensate for the missed exam course percentage. DW also reserves the right to assign an exam grade of 0% should he deem the absence was not properly handled or was unjustified. Appeals will be handled in accord with University Policy Statement 900823, Academic Grievance Procedures for Students.

The final exam is Thursday, May 9, 8 AM to 10 AM.
(Online Schedule: http://www.shsu.edu/students/finalexam.html)
Modify your plans NOW to fit your academic schedule.

Out of Class Participation (Homework, Control Charting, Responsiveness)

Homework assessment will take place on Blackboard. The only way to make 100% on the homework is to take the test once to see what material you know. Then, print the pdf of the homework assignment. Do the problems, and then enter your answers on Blackboard. See if you improved. Work on the problems you do not understand until you figure them out. Then, take the exam again. Repeat until you have 100%. If you wait until the day before the exam to enter your answers, you will NOT get a 100% because you did not show that you participated in the process of learning the material. DW wants to see you interact with the material. There will be a grading rubric placed on Blackboard to explain the scoring.

Most of the exam material will come from modified Blackboard homework problems. If you do not know WHY the homework multiple choice answers are wrong and right, then you will do poorly on the exams. One or two exam questions will come from “A-level” problems or A-level concepts suggested in class.

Control Charting (Process Monitoring Writing Assignment) Each student will choose a continuously variable process that they can monitor DAILY the whole semester. The data will become a control chart. Weekly comments will be required, and the whole semester will be evaluated in a final quality report.

Responsiveness is critical in “the real world”. You must respond to emails from DW within 24 hours. Many times a response is merely a “thank you” acknowledging that you received an announcement. But often action is needed on your part, and you must respond accordingly. A gradebook item will be used to keep track of those who 1) become “unresponsive”, 2) lose emails, or 3) reach the storage limits of their campus inbox. DW will not use off-campus emails, because the use of private email accounts are not allowed in some “real world” employment situations. You should learn how to clean up your campus account.

Quality Report
The quality report will be based upon the student’s control chart process monitoring. It will address all significant quality events, give estimates of the reliability of the process, etc. More details will be given on Blackboard.

In-Class Participation (Attendance, Preparation, and Participation)
• Students will not be penalized for missing up to three hours of lecture as long as examinations and other assigned work have not been missed. Each absence beyond 3 will result in a loss of 5%.
• Being unprepared (like showing up to the exam without a scantron) will result in a loss of 5%.
• Participation is important. Falling asleep or failing to engage in classroom discussions will result in a loss of 5%.

Employment Recommendations
For Your Information: Dr. Williams will only write recommendation letters to Forensic Programs for students who make an A in this course. Very few exceptions exist, and those were for students who worked in his lab, and proved themselves by doing excellent research. The Forensic Science field is very competitive. Compared to what you have already experienced in your degree program, this course is not that challenging, although it is a lot of material.

Academic Dishonesty
• Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating, plagiarism, and the abuse of resource materials.
• DW reserves the right to ask for an oral explanation of work submitted to determine if the student actually performed the work. This should not be construed as an accusation of academic dishonesty. Only in cases where the student cannot demonstrate the most basic explanation of what they submitted as their original work will there be any question of dishonesty.
• If DW believes that exam work or an assignment is a copy of another student’s work, BOTH students may receive a grade of 0%, and disciplinary action will be considered.


**Classroom Rules of Conduct**

Students will refrain from behavior in the classroom that intentionally or unintentionally disrupts the learning process. Cell phones must be turned off before class begins. Students are prohibited from text messaging, emailing, Facebooking, or engaging in any other form of distraction. Students who are especially disruptive will be asked to leave and may be reported to the Dean of Students for disciplinary action.

**Visitor Policy**

Dr. Williams will decide whether or not visitors will be allowed to remain in the classroom.

**Americans with Disabilities Act**

No disability accommodations can be made until the student registers with the Counseling Center.

**Religious Holidays**

University policy (APS 861001) and state law (Section 51.911(b), Texas Education Code) require that a student who is absent from class for the observance of a religious holy day fill out form (see APS 861001) in the first week of class. This form must be signed by the instructor, the student, and approved by the departmental chair.

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