Course Title: IST 281/ISC 205Introduction to Forensics Spring 2008

Instructor:
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Class webpage
http://science.marshall.edu/murraye/Introduction%20to%20Forensic%20Science.html

Office Hours:
3-4 MWF (after lab)
by appointment 11-12 MWF
By appointment on T/Th
I strongly encourage students to meet me during office hours or contact me via e-mail.

Course Description: This course is designed for science and nonscience majors who are interested in Forensic Science and Crime Scene Investigation. Lecture covers theoretical background of forensic science as well as illustrating the technology with cases. Laboratory covers Forensic DNA analysis, Questioned Documents, Crime Scene Investigation, Bite Marks, Fingerprints, Trace evidence, Forensic Entomology and Blood Spatter Analysis.

Credit Hours: 4

Prerequisites: MTH 121 or permission of instructor.

Recommended Texts:
Instructor will provide additional protocols, technical articles, worksheets and laboratory notes based on murder of Lyle and Louise. On-line Internet resources, including biotechnology company websites, technical information, tutorials and simulations will be provided in WebCT Vista.

Computer: Access to a Pentium computer with WebCT, Internet, and current Marshall Microsoft Windows packages.

Desired Learner Outcomes/Objectives:

Student will review and expand their knowledge of forensic science concepts.

- The learner will develop science process skills (knowledge of the scientific foundation for the techniques used and their appropriate application).
- The learner will develop science manipulative skills (specific laboratory techniques).
- The learner will develop communication and documentation skills used preparing evidence for use in court.

- The learner will demonstrate the knowledge of various careers in forensic science and the techniques used in Forensic Science.
- The learner will learn critical thinking skills and to evaluate forensic evidence in a legal context.
- Students will learn practical, hands on methods used in the Forensic Science Lab:

Evaluation/Measurement of Learner Outcomes:

Learners will be expected to read and understand the web page content. This will be assessed using the quizzes. The Friday meeting time will guide you to new web page content and handouts so it is important. We will also have quizzes every other Friday. This class will not have traditional lectures, however.

Exams: 50%
There will be two exams (15% each) and a comprehensive final exam (20%).

Lab: 30%
Lab will be evaluated in the following manner:

1. Prompt attendance and participation.. You can't learn much if you aren't here, and it is very inconvenient for me to have you make up the lab. If you skip >2 labs without a legitimate excuse, your grade in lab will drop by one letter. If you skip >4 labs, it will drop by two letters and so on. I will have an attendance book and have students sign in.
2. Pre-Lab and Post-Lab Questions. It is critical to read the labs before class. I will hand out lab instructions and both prelab and post-lab questions before each laboratory. The prelab questions are due before starting the lab and the post-lab questions are due one week after the lab. 20%
3. Lab safety and cleanliness. You can lose points for unsafe behavior and lack of cleaning up after yourself. If you are an exceptional lab citizen, your grade will reflect this. 5%
4. Final Mock Trial based on Lyle and Louise evidence and suspects. 5%

Participation Questions: 10%.
During lecture and possible lab, you will have the opportunity to answer a short participation question. There will be about one question for each lecture of a minimum of 30 questions. You will be able to drop 3 questions and the rest will count towards this 10%. I will collect the cards after class and mark them in the class grading software and then file them. I won't return the cards, but you should be able to check the file to see which ones I have.

Report on a Fiction Book, Video, Computer Game or other Media Source 10%
In consultation and with the approval of the instructor, each student will select a work or episode of fiction (book, video or other media) that includes some elements of forensic science. Video materials describing true crimes such as Forensic Files, Unsolved Mysteries, etc. are excluded. Specific guidelines follow.

Grading Policy:
Course will be graded by 1000 points.
A= ≤ 900 points
B= ≤ 800 points
C= ≤ 700 points
D= ≤ 600 points
F= ≤ 500 points

Class Policies:

Safety:

Students are expected to work safely and clean up after classes. Safety is a priority- if you have doubts about the safety of what you are doing, stop and ask instructor! Students should work carefully with equipment. Students should read and understand the safety component of each lab. You can't work safely if you don't know what you are doing.
Do not eat or drink in the lab! Instructor reserves the right to toss your food or drink.

Cell Phone:

Please, as a courtesy to the instructor and others, don't use your cell phones in class or lab. If you have an emergency call, use the vibrate option and step outside to take the call.

Attendance Policy:

This class requires faithful attendance, since it is necessary that students perform laboratory skills under the supervision of instructors. It is the student's responsibility to meet with instructor to discuss absences due to illness or other reasons. The university attendance policy (p121 online catalog) will apply for excused absences. Please let me know about planned excused absences and you may be able to perform lab earlier.

WebCT:

We will use WebCT and the instructor's class web page extensively in class. Grades will be posted in WebCT after each exam along with lab assignments, copies of slides, old quizzes, and data generated in labs and additional links. Make sure you know how to use this valuable course tool. I will also be trying a grading software that should be easier than WebCT.

Learning disabilities:

Learning disability will be accommodated. Please provide the required assessment so I can do this appropriately. http://www.marshall.edu/disabled

Academic Dishonesty:

Students should do their own work unless participating in a team assignment.
http://www.marshall.edu/lcob/old/Policy/Academic_Dishonesty_Policy.pdf

Course Schedule

Lab schedule is approximate and will be refined as the course progresses. We will schedule a scrime scene lab when Dr. Fenger's lab is available. Therefore the exact labs listed here are tentative

Week	Lab (Mondays and Wednesdays)
January 14	Safety, Video on Crime Scenes
January 21	Footprints and trace evidence
January 28	Bloodspatter
February 4	Bitemarks
February 11	Microscopes and trace evidence
February 18	Hair and fiber evidence
February 25	Presumptive testing for blood/Luminol
March 3	Forensic DNA and gel electrophoresis
March 10	Purification of our class DNA and PCR
March 17	Gel electrophoresis of our DNA

March 24	Spring Break
March 31	Forensic Entomology
April 7	Questioned Documents
April 14	Fingerprints
April 21	Crime Scene
April 28	Mock Trial Paper due
May 5	Finals Week