



Syllabus
FS 230 Forensic Sciences (3)
Fall 2014
Wesselkamper Science Center, Room 120

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Lecture: M, W, F 0930 – 1020 hours

Office Hours: M & W 1100 – 1200 and T & Th 1130 - 1230
Any other time by appointment

COURSE DESCRIPTION

The purpose of this course is to survey major disciplines that fall under the umbrella of forensic sciences. The primary tools in the investigation of civil and criminal cases are the same, which include recognition, preservation, documentation, collection, examination, and the interpretation of physical evidence. In order for a forensic science laboratory to be used efficiently and effectively, it is necessary for all personnel within the justice system be sufficiently well instructed in the elements of criminalistics to enable them to appreciate the value of the contributions forensic science has in legal investigations. Physical evidence is demonstrative and testamentary information using the techniques of science and the use of scientific methods to assist the trier of fact to understand events which may explain what, where, how, when, who, and ultimately, but rarely, why a series of events happened, which is the objective of an adversarial trial system.

MEASURABLE LEARNING OUTCOMES

Reasoning

- ① One purpose of the course is to encourage students to interact with their peers and foster collegiality.
- ② Discuss the legal framework in which criminalistics is conducted under the umbrella of forensic science.
- ③ Discuss the value of common forms of physical evidence in the reconstruction of past events.
- ④ Discuss and explain the importance and responsibility of a forensic scientist to understand, practice and work according to ethical guidelines.

Knowledge

- ✍ Become familiar with current forensic science topics in order to develop a deeper understanding of the underlying issues under debate, and form an evidence (factual) based opinion about subject matter; Synthesize related scientific literature.
- ✍ Evaluate currently used scientific procedures and methodologies for a variety of forensic science disciplines.

Practical skills

- ✍ Apply knowledge of current events and related topics to the evaluation of various analytical procedures, applications of these procedures to the appropriate types of evidence. And, to identify research in the analysis of various evidence and subjects associated with forensic evidence.
- ✍ Produce exemplary presentation of scientific subject matter in order to effectively communicate research design, which includes proper evidence controls (positive and negative), use of standards (SRMs, CRMs, etc.), proper use of the scientific method, presentation of data obtained through proper interpretation, and what constitutes a scientific opinion.

Communication

- ✍ Present scientific facts and opinions in a clear and logical oral and written manner;
- ✍ Become more confident and comfortable with subject material in order to participate and disseminate scientific information to other scientists and "juries" by delineating analytical procedures, results, discussions and interpretations.

REQUIRED TEXTS

Houck MM, Siegel JA (2010) Fundamentals of Forensic Science. 2nd Edition. Academic Press, Burlington, MA.

The foundation of this course is based on becoming familiar with the literature and the "state of the science" associated with various topics, and effective communication of issues related to these topics.

"Test Your Knowledge" HOMEWORK EXERCISES

Chapter	Date Due	Chapter	Date Due	Chapter	Date Due
1	29 Aug	23	03 Sep	3	08 Sep
2	10 Sep	6	15 Sep	4	17 Sep
21	22 Sep	22	01 Oct	20	06 Oct
10	08 Oct	11	10 Oct	7	17 Oct
9	22 Oct	8	27 Oct	13	31 Oct
14	07 Nov	12	10 Nov	15	14 Nov
16	17 Nov	17	21 Nov	18	01 Dec

All homework exercises are to be hand written; type written (i.e., Word document, Word Perfect, or other) submissions are not acceptable.

TENTATIVE LECTURE SCHEDULE

Week	Date	Chapter	Lecture Topics – Subject to Change
1	25 Aug 27 Aug 29 Aug	1 23	Introduction – Syllabus and Course Requirements Criminal Justice and Forensic Sciences Legal Aspects of Forensic Science
2	01 Sep 03 Sep 05 Sep	23 1	No Classes (Labor Day) Admissibility and Testimony Ethics, Professional Practice
3	08 Sep 10 Sep 12 Sep	3 2 6	Physical Evidence Crime Scene Investigation Separation Methods
4	15 Sep 17 Sep 19 Sep	4	Microscopy EXAM 1
5	22 Sep 24 Sep 26 Sep	19 21	Friction Ridge Examination AFIS/Retinal Scan Firearms
6	29 Sep 01 Oct 03 Oct	22	Tool Mark Impressions Footwear Impressions Tire Track Impressions
7	06 Oct 08 Oct 10 Oct	20 10 11	Questioned Documents Forensic Biology Serology & Genetics
8	13 Oct 15 Oct 17 Oct	10 7	No Classes (Founder's Day) Bloodstain Pattern Analysis Pathology
9	20 Oct 22 Oct 24 Oct	9	Taphonomy Entomology EXAM 2
10	27 Oct 29 Oct 31 Oct	8 13	Anthropology Odontology Controlled Substances
11	03 Nov 05 Nov 07 Nov	14	Forensic Chemistry and Trace Evidence Toxicology
12	10 Nov 12 Nov 14 Nov	12 15	Hair Fiber/Textiles
13	17 Nov 19 Nov 21 Nov	16 17	Paint Glass
14	24 Nov 26 Nov 28 Nov	17	Soil No Classes (Thanksgiving)
15	01 Dec 03 Dec 05 Dec	18	Fires and Explosions Current Topics in Forensic Sciences Current Topics in Forensic Sciences
16	09 Dec		FINAL EXAMINATION 1100 – 1300 hours

EVALUATION OF STUDENT PERFORMANCE

Grading:

The final course grade is comprehensive and contributed by exams, quizzes, and homework.

Activity	Points
Exercises	10 pts x 21
Exam 1	100
Exam 2	100
Final Exam	200
POSSIBLE	610

Grading Scale		
100% - 90%	A	610-549
89% - 80%	B	548-488-
79% - 70%	C	487-427
69% - 60%	D	426-366
≤ 59%	F	365 or less

The course grade depends solely on each student's individual performance, rather than any other personal reason. If the student misses an exam due to an emergency, a make-up exam or equivalent assignment must be requested in writing within one calendar week and must be accompanied by an official document and statement to prove the emergency; otherwise there will be no make-up exam and the grade will be zero. There is no compromise of the grade for a verifiable emergency (medical or other) situation. All students must attend the final exam. Missing the final exam will lead to either a failing grade or an incomplete, but only due to an emergency. No make-up final exam will be given.

Student Success:

In addition to attending lectures and performing laboratory experiments, students are expected to spend a considerable amount of time every week studying for this course. Students are encouraged to study in small, well organized groups. Peer-based teaching has proven to be a very valuable experience that results in a deeper understanding of course materials, which is reflected in higher individual performance and retention of course content.

Cheating:

Each student is expected to complete the laboratory work independently. Submission of identical lab report or sharing data is treated as cheating. Cheating on an exam, homework or laboratory assignment will result in a zero for that particular assignment, or lead to a stricter penalty based on official University policy.

Statement of University Policy on Plagiarism:

Plagiarism is the presentation of someone else's ideas, words, or artistic, scientific, or technical work as one's own creation. Using the ideas or work of another is permissible only when the original author is identified. Paraphrasing and summarizing, as well as direct quotation all require proper citation to the original source.

Plagiarism may be intentional or unintentional. Lack of dishonest intent does not necessarily absolve a student of responsibility for plagiarism.

It is the student's responsibility to recognize the difference between statements that are common knowledge (which do not require documentation) and restatements of the ideas of others. Paraphrase, summary, and direct quotation are acceptable forms of restatement, as long as the source is cited.

REMINDERS OF IMPORTANT UNIVERSITY-WIDE POLICIES

The following policies are summarized from the Student Handbook. Please remember, it is your responsibility as a student to review these and the other policies that your Handbook contains.

Attendance:

Students are expected to attend all classes. The University assumes you are mature enough to be responsible for your own behavior. Any absence of two weeks or more will be reported to the Office of the Associate Provost and the Registrar. You should notify me when illness prevents you from attending class and make arrangements to complete missed assignments. Notification may be done by calling me, or by leaving word at the Faculty Services (735-4739). Depending on your circumstances, I may modify deadlines of course requirements. Anyone who stops attending a course without officially withdrawing may receive a failing grade. Students with three or more unexcused absences will lose one letter grade.

Classroom Deportment

- You are expected to be punctual; unexcused tardiness will be considered an absence.
- Smoking and alcoholic beverages are prohibited in all classrooms, whether or not class is in session.
- No pets are allowed in class. Exceptions will be made in the case of a seeing-eye dog.
- Personal audiovisual equipment not pertinent to the class is prohibited during class.
- Follow the University's "dress code" requiring footwear and appropriate shirts to be worn during all classes, as well as in the library, cafeteria, and administrative offices.

Academic Honesty:

Students are responsible for promoting academic honesty at Chaminade by not participating in or facilitating others' participation in any act of academic dishonesty, and by reporting incidences of academic dishonesty (such as theft of tests, records, and other confidential materials, altering grades, and/or plagiarism) to their instructors.

Freedom of Expression:

Students are free to take reasoned exception to the views offered in particular courses of study. They may be required to know thoroughly the specific bodies of knowledge or interpretations or theories set by the professor, but are free to reserve personal judgment as to the truth or falsity of them.

Students are expected to maintain the standards of academic performance articulated in course syllabi, supplemental readings, assignments, and Academic and Student Affairs policies. The instructor is considered the normal and competent judge of academic work. Students have an appeals process in the rare cases of unjust grading and evaluation by the procedure detailed in the Academic Grievance section of the Student Handbook.

ADA Accommodations:

In compliance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA) of 1990, and the ADA Amendments Act (2008), Chaminade University of Honolulu offers accommodations for individuals with disabilities. If you would like to determine if you qualify for ADA accommodations, please contact the Counseling Center at (808) 735-4845. Once your documentation is submitted, the assessments will be reviewed and the student will be notified.

If one qualifies for ADA accommodations an ADA contract will be signed by the student. Please remember that once you have signed an ADA agreement, you need to contact the ADA coordinator each semester (including summer sessions) to identify which instructors you want notified of your accommodations. This is to ensure your privacy. Faculty will be informed of the accommodations you are to receive but not the nature of your disability. From the time that appropriate documentation is received by the ADA Coordinator, please allow 2 to 3 weeks to process your paperwork. Processing time may vary pending the volume of requests received. You can find more information at http://www.chaminade.edu/student_life/sss/counseling_services.php