Course Syllabus: CJFS 3400

Survey of Forensic Science

Fall 2023

1.0 Course Information

Location: DSC 6 **Time: MW**– online, **F**– in-person; 10:20 – 11:20am
Credit Hours: 4 Credits **Course Prerequisite(s):** None

1.1 Required Texts/Items

Title: Fundamentals of Forensic Science, 3rd Ed. 2015.
Authors: Houck & Siegel.
ISBN: 9780128000373

2.0 Instructor and Contact Information

Instructor: Dr. Jamie Spaulding
Contact: 📧 jspaulding02@hamline.edu 📱 (651) 523–22374
Office: GLC 219W **Office Hours:** M, 12–2pm; R, 2:30–4pm
Note: I also maintain an open door policy, feel free to stop by my office.

3.0 Course Description

This course will provide an overview of the foundations and history of forensic science with an emphasis on criminalistics. The various disciplines and specialties within forensic science, different types of evidence, and the responsibilities of practitioners will be discussed. Topics covered in this course include: crime scene processing; the nature of evidence; evidence collection, analysis, interpretation, and admissibility; fingerprint and latent print examinations; forensic document examination; firearm and toolmark examinations; trace evidence analysis; drug chemistry; toxicology; fire and arson investigations; entomology; forensic pathology and anthropology; and ethical considerations of forensic science.

3.1 Course Learning Objectives

Upon successful completion of this course, students will be able to:

1. Describe the nature and use of physical evidence.
2. Explain how physical evidence is recognized, collected, examined, and interpreted.
3. Identify various disciplines of forensic science and the qualifications of practitioners.
4. Describe the techniques, instrumentation, and equipment used in forensic science laboratories.
5. Explain the impact of the legal system on the practice of forensic science.

3.2 Hamline Plan Learning Objectives (N)

This course fulfills the disciplinary breadth natural science (N2) requirements of the Hamline Plan where you are introduced to theories and methodologies of the natural sciences. Upon completion of this course, a student will be able to:

1. Use scientific practices (a) asking questions, b) developing and using models, c) planning and carrying out investigations, d) analyzing and interpreting data, e) using mathematics and computational thinking, f) constructing explanations, g) engaging in argument from evidence, and h) evaluating and communicating ideas) to investigate questions.
2. Evaluate claims on the basis of experimental or observational evidence as well as scientific reasoning.
3. Evaluate the impact of scientific and technological advances on society and the environment.

3.3 Assessment of Learning Objectives

Throughout the course, coursework has been intentionally designed to measure the learning objectives of both the course (C) and the Hamline Plan (H). The following table outlines the specific assignments which evaluate student achievement of each learning objective throughout the course.

Learning Outcomes	**Specific Relevant Assessments**
C1	Assignment 1
C2	Assignments 2 & 3; Exams; Quizzes
C3	Assignment 4; Exams; Quizzes
C4	Assignments 1-3 & 5; Exams; Quizzes
C5	NIJ Course Assignment; Exams; Quiz 10
H1	Research and Experimentation in Forensic Science
H2	Assignments 1-3; Research and Experimentation in Forensic Science
H3	Assignment 5

4.0 Course Assessment

Assignment	**Points Possible**
Active Engagement	50
Quizzes (20 pts x 10)	200
Research in Forensic Science	100
Assignments/Reports (50 pts x 5)	250
Midterm Exam	150
Final Exam	250
Total Points	**1000**

Letter Grade Distribution:

			A	93-100%	≥930	A-	90-92%	900-929
B+	87-89%	870-899	B	83-86%	630-669	B-	80-82%	800-829
C+	77-79%	770-799	C	73-76%	630-669	C-	70-72%	700-729
D	67-69%	670-699	D	63-66%	630-669	D-	60-62%	600-629
F	<60%	≤599						

5.0 Course Policies

5.1 Grading

All work is due at the start of class on the date indicated in the schedule listed below. Work submitted after the due date will be docked 15% initially and an additional 10% every day thereafter, weekends included. Late work will not be accepted five (5) days after the deadline. Grades will be maintained in Canvas. Students are responsible for tracking their progress throughout the semester and notifying the instructor of any errors.

If at any point you feel that your work has not been properly graded, you may request a re-grade within one week of receiving the grade.

5.2 Attendance and Make-Up Policy

Consistent with Hamline University guidelines, students absent from regularly scheduled examinations because of authorized university activities or extenuating circumstances (major family situation, hospitalization or other serious issues, religious observance, etc.) will have the opportunity to take them at an alternate time. Please inform the instructor as soon as possible in such an event to arrange extensions prior to absence.

5.3 Active Engagement

Students will be assessed on their ability to respond orally in real time to in-class questions and discussions. Students are expected to make informed and constructive contributions to the in-class discussions, and to maintain an environment that is respectful and inclusive. Differences of opinion are expected and welcome, but should be expressed in a courteous manner. Cell phones are not to be used unless instructed to do so. Talking during lectures will also reduce participation grades.

5.4 Assessments & Quizzes

Quizzes based on the reading and lectures will be throughout the course. You must be present for all quizzes, the midterm, and the final. Exams will not be handed back to students. You may review your exam once it has been graded by contacting the instructor.

5.5 Technology/E-Mail Policy

It is the student's responsibility to ensure that their computer is functioning and have backed up important documents. A problem with technology is not an acceptable reason for missed or late work. Important notices and corrections of errors will be sent to the Hamline email distribution list for the class to provide the fastest dissemination of the information. The instructor will make every effort to respond within one day to emailed questions or concerns.

6.0 Academic Honesty

Students in the Department of Criminal Justice and Forensic Science are held to the most stringent professional code of ethics; violations can seriously jeopardize future employment prospects. The integrity of the classes offered by any academic institution solidifies the foundation of its mission and cannot be sacrificed to expediency, ignorance, or blatant fraud. While I do not expect to encounter cheating or plagiarism this semester, it is important that you know the consequences. Cheating, plagiarism, or other forms of academic dishonesty are not tolerated. *Failing to cite a source correctly in writing is plagiarism!* Academic integrity is essential to a positive teaching and learning environment. All students enrolled in University courses are expected to complete coursework responsibilities with fairness and honesty. Failure to do so by seeking unfair advantage over others or misrepresenting someone else's work as your own, can result in disciplinary action. The Academic Honor Code Statement of Purpose reads as follows:

6.1 Academic Honor Code Statement of Purpose

Every member of the Hamline University community – students, faculty, administrators, and staff – is responsible for upholding the highest standards of academic integrity at all times. The assumption that academic work is an honest reflection of one's knowledge and skills is fundamental to the integrity of Hamline University and to the value of a Hamline diploma. If students at an institution of higher education develop a reputation for receiving grades based on honest work, GPAs and academic degrees held by all students from that institution are valued more highly. The faculty subscribe to standards of academic honesty in their research and teaching. Every person in the University is responsible for adhering to the principles of the Academic Honor Code.

6.2 Violations and Sanctions

Violations of the Academic Honor Code will be dealt with seriously. If a student is accused of engaging in academic dishonesty in a class, the faculty member may decide on a sanction for the student (*e.g.,* assign a failing grade for an exam or the course). The student will be informed of the alleged violation, the evidence upon which the allegation is based, and the sanction to be imposed. The faculty member will file a violation form with the Office of the Dean where the course is housed, which will maintain a permanent record of reported student violations. Students may appeal to the

Chair of the Department in which the class is housed. Should a student be dissatisfied with the decision of the Department Chair, the student may appeal to the appropriate academic Dean. The decision from that office will be final. Sanctions for students found to have engaged in academic dishonesty may include:

- Failing or receiving a lower grade on an exam, paper, or assignment
- Failing or receiving a lower grade for a course
- Academic suspension or expulsion

Please refer to the Academic Honor Code and Student Conduct Code online for the definitions of acts considered to fall under academic dishonesty and possible ensuing sanctions and further details.

7.0 Social Justice Statement

Hamline University is committed to social justice. I concur with that commitment and expect to maintain a positive learning environment based upon communication, mutual respect, and non-discrimination. Our University does not discriminate on the basis of race, sex, age, disability, veteran's status, religion, sexual orientation, color, or national origin. Any suggestions as to how to further such a positive and open environment in this class will be appreciated and given serious consideration. See the Wesley Center website for further details.

8.0 Special Accomodations

If you are a person with a disability and anticipate needing any type of accommodation in order to participate in this class, please advise me and make appropriate arrangements with Steve Anderson; Director of Disability Resources (651-523-2740, West Hall 108) as soon as possible to discuss accommodations. Please see the Disability Resources website for further details. If you have already arranged accommodations through Disability Resources, please ensure submission of your accommodation letter within the first two weeks of class. Accommodations will only be provided after the letter is submitted to me and with sufficient lead-time for me to arrange testing or other accommodations. Although I will receive the letter electronically, I expect you to initiate a conversation with me about the accommodations.

9.0 Adverse Weather Statement

In the event of inclement or threatening weather, everyone should use his or her best judgment regarding travel to and from campus. Safety should be the main concern. If you cannot get to class because of adverse weather conditions, you should contact me as soon as possible. Similarly, if I am unable to reach our class location, I will notify you of any cancellation or change as soon as possible (1 hour before class starts) via email to prevent you from embarking on any unnecessary travel. If you cannot get to class because of weather conditions, I may make allowances relative to required attendance policies, as well as any scheduled activities.

10.0 Tentative Course Outline

Please note that this schedule is subject to change at the discretion of the instructor.
Note: **Bolded dates** designated are in person meetings for the course.

Week	Date	Content/Material	Assigned Readings
1	8/28	Introduction to Forensic Science	Ch. 1
	8/30	Introduction to CSI & Roles at the Crime Scene	Ch. 2
	9/1	Crime Scene Processing	
2	9/4	**No Class** – Labor Day Holiday	
	9/6	The Crime Lab	
	9/8	The Nature of Physical Evidence **Quiz 1:** *Crime Scene Investigation*	Ch. 3
3	9/11	Locard's Principle of Exchange	
	9/13	Case Study – The Gorton Case	
	9/15	Locard Transfer Lab	
4	9/18	Forensic Pathology **Quiz 2:** *Physical Evidence*	Ch. 7
	9/20	Trauma	
	9/22	Forensic Anthropology **Assignment 1 Due:** *Locard Transfer Lab*	Ch. 8
5	9/25	Entomology	Ch. 9
	9/27	Biological Fluids & Evidence	Ch. 10
	9/29	Serology	
6	10/2	Introduction to DNA	Ch. 11
	10/4	Bloodstain Pattern Analysis	pp. 250-256
	10/6	Bloodstain Pattern Analysis Lab **Quiz 3:** *Biological Evidence/Serology*	
7	10/9	DNA Interpretation	
	10/11	**Midterm Exam (Canvas)**	
	10/13	**No Class** - Midterm Break	

8	10/16	Footwear, Tire Track, and Impression Evidence **Quiz 4:** *DNA*	Ch. 22
	10/18	Fingerprint Examination **Assignment 2 Due:** BPA Lab	Ch. 19
	10/20	Fingerprint Examination Lab	
9	10/23	Latent Fingerprints	
	10/25	Questioned Document Examination	Ch. 20
	10/27	Firearm/Toolmark Examination **Assignment 3 Due:** *Fingerprint Lab*	Ch. 21
10	10/30	Overview of Research/Experimentation Assignment **Quiz 5:** *Fingerprint Examination*	
	11/1	Trace Evidence	Ch. 4
	11/3	Trace Evidence **Quiz 6:** *Firearm Examination*	Ch. 15-16
11	11/6	Introduction to Controlled/Illicit Substances **Assignment 5 Topic Due:** *Research in Forensic Science*	Ch. 13
	11/8	Analysis of Controlled Substances/Drugs of Abuse **Quiz 7:** *Trace Evidence*	pp. 120-137
	11/10	Toxicology	Ch. 14
12	11/13	Arson/Fire Scene Investigation **Quiz 8:** *Drug Chemistry*	Ch. 18
	11/15	Digital Evidence	Ch. 24
	11/17	Case Study – The OJ Simpson Case	
13	11/20	Research/Experimentation in Forensic Science	
	11/22	Research/Experimentation in Forensic Science **Assignment 4 Due:** *Errors in Forensic Science* **Quiz 9:** *Digital Evidence*	
	11/24	**No Class** - Thanksgiving Break	
14	11/27	Introduction to Forensic Psychology – *Jillian Peterson*	
	11/29	Legal Aspects of Forensic Science	Ch. 25
	12/1	Case Study – The Sam Sheppard Case	
15	12/4	Ethical Considerations in Forensic Science **Assignment 5 Due:** Advances in Forensic Technology	
	12/6	Semester Recap/Review for Final Exam **Quiz 10:** *Legal Aspects* **Assignment Due:** *Research in Forensic Science*	
	12/8	**No Class –** Study/Reading Day	
Finals		**Final Exam – Due 12/14; 2359 hrs**	