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**PHYSICAL FORENSIC SCIENCE
(FS 333)
COURSE INFORMATION AND OBJECTIVES**

COURSE DESCRIPTION

This course is designed to give the student an overall view of the organization of a Crime Laboratory and provide understanding of how each discipline functions in the examination and analysis of evidence. This course will also provide the student with a basic understanding of the principles and procedures used within each discipline in examining and analyzing their particular types of evidence.

COURSE OBJECTIVES

Upon the completion of the course the student should have a reasonable understanding of:

1. The history of criminalistics and Crime laboratories.
2. The organizational structure of a Crime laboratory and the role of each discipline within the organization.
3. The minimum educational and training requirements for each discipline in the Crime Laboratory.
4. Basic principles and techniques used in the examination of Questioned Documents, Footwear, and Tire Prints.
5. Basic principles and techniques used in the examination of Firearms and Toolmark evidence, Bullet and Cartridge cases, Distance Determination, Recovery of Firearm evidence, and Serial Number restoration.
6. Basic principles and techniques used in the examination and analysis of Trace Evidence, Hair and Fiber evidence, Paint and Glass evidence, Gunshot Residue/Explosives evidence, and Fire Debris evidence.
7. Basic principles and techniques used in the examination and analysis of Dangerous Drugs, Chromatography methods, Spectrometry/ Mass Spectrometry methods and Classes of Controlled Substances.

TEXTBOOK

CRIMINALISTICS, An Introduction To Forensic Science (Sixth Edition),
Richard Saferstein.

HANDOUTS provided by the instructors.

ATTENDANCE

Attendance is critical and expected for the course. Each class is worth 5 points for a maximum of 100 points for the course. One excused absence will be allowed during the course. However, the class in which absence occurs will be worth only 3 points. In order for the student to receive credit for an excused absence they must notify the instructor in advance of the class.

READING ASSIGNMENTS

Students are expected to read the assigned and relevant Chapters and Handouts prior to coming to class.

COURSE EVALUATION

Students will be evaluated based on their total scores from **FOUR QUIZZES** and a **FINAL EXAM**. Each instructor will give the quizzes for the specific discipline covered and will be worth 50 points each for a total of **200 points** (see course schedule). The final exam will be cumulative and will be given the last day of class. The final exam will be worth **200 points**. The maximum number of points for attendance in class is **100 points**.

A = 500-450 points

B = 449-400 points

C = 399-350 points

D = 349-300 points

CLASS DATES AND TIMES

1/9/01 -3/20/01

Tuesdays & Thursdays

5:45p – 7:50p

INSTRUCTORS

Jim Josey
Honolulu Police Department
Scientific Investigation Section Crime Laboratory
Phone: 529-3281

Curtis Kubo
Honolulu Police Department
Scientific Investigation Section Crime Laboratory
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Tracy Tanaka
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Judith Christensen
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Scientific Investigation Section Crime Laboratory
Phone: 529-3281

Claire Chun
Honolulu Police Department
Scientific Investigation Section Crime Laboratory
Phone: 529-3281

PHYSICAL FORENSIC SCIENCE
FS 333
CLASS SCHEDULE

DATE	TOPIC	INSTRUCTOR	READING
1/9/01	Introduction to Forensic Science	Jim JOSEY	Chapter 1
1/11/01	Questioned Documents Identification of Handwriting Methods of obtaining specimens	Jim JOSEY	Chapter 6 & Handouts
1/16/01	Identification of Handwriting	Jim JOSEY	
1/18/01	Identification of Paper, Writing Instruments, Inks, Typewriting Photocopiers and Computer Generated Documents	Jim JOSEY	
1/23/01	Quiz 1 (50 points) Restoration of Obliterated and Erased Writings, Unusual Questioned Document problems	Jim JOSEY	
1/25/01	Footwear and Tire Print Identification Recovery Techniques Types of Comparisons Preparing Known Specimens Comparison Procedures Types Opinions	Jim JOSEY	Pages 492-499
1/30/01	Firearms and Toolmarks Comparison Microscope Bullet & Cartridge case ID Drugfire & IBIS systems Distance Determination Recovery of Firearm Evidence	Curtis KUBO	Pages 188-189 Chapter 15
2/1/01	Quiz 2 (50 points) Serial Number Restoration Toolmark Identification Misc. examinations	Curtis KUBO	

2/6/01	Introduction To Trace Evidence Analysis Inorganic Analysis	Tracy TANAKA Claire CHUN	Chapter 6
2/8/01	The Microscope Hair Examinations	Tracy TANAKA Claire CHUN	Chapters 7 & 8
2/13/01	Fiber Examinations	Tracy TANAKA Claire CHUN	Chapter 8
2/15/01	Quiz 3 (50 points) Paint Examinations	Tracy TANAKA Claire CHUN	Chapter 8
2/20/01	Glass Examinations	Tracy TANAKA Claire CHUN	Chapter 4
2/22/01	Gunshot Residue and Explosives Examination	Tracy TANAKA Claire CHUN	Chapters 11 & 15
2/27/01	Fire Debris Examinations	Tracy TANAKA Claire CHUN	Chapter 11
3/1/01	Introduction to Drug Identification Chromatography Methods	Judy CHRISTENSEN	Chapter 5
3/6/01	Spectrometry Methods Mass Spectrometry	Judy CHRISTENSEN	Chapter 5
3/8/01	Quiz 4 (50 points) Class of Controlled Substances	Judy CHRISTENSEN	Chapter 9
3/13/01	Controlled Substances (cont'd)	Judy CHRISTENSEN	Chapter 9
3/15/01	Techniques used in Drug Identification	Judy CHRISTENSEN	Chapter 9
3/20/01	FINAL EXAM (200points) Cumulative	Jim JOSEY	

January 2001

January 2001

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

February 2001

S	M	T	W	T	F	S
	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

Monday	Tuesday	Wednesday	Thursday	Friday	Sat/Sun
January 1, 01	2	3	4	5	6
8	9	10	11	12	13
	1745-1945		1745-1945		
	Intro. To F/S Jim Josey		Ques. Doc. Jim Josey		
15	16	17	18	19	20
	1745-1945		1745-1945		
	Ques. Doc. Jim Josey		Ques. Doc. Jim Josey		
22	23	24	25	26	27
	1745-1945		1745-1945		
	Ques. Doc. Quiz 1 Jim Josey		Footwear & T/Print Jim Josey		
29	30	31			
	1745-1945				
	Firearms & T/Marks Curtis Kubo				

February 2001

February 2001

March 2001

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
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S	M	T	W	T	F	S
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Monday	Tuesday	Wednesday	Thursday	Friday	Sat/Sun
			February 1	2	3
			1745-1945 Firearms & T/Marks Quiz 2 Curtis Kubo		
5	6	7	8	9	10
	1745-1945 Trace Evidence Claire Chun		1745-1945 Trace Evidence Claire Chun		11
12	13	14	15	16	17
	1745-1945 Trace Evidence Claire Chun		1745-1945 Trace Evidence Quiz 3 Claire Chun		18
19	20	21	22	23	24
	1745-1945 Trace Evidence Claire Chun		1745-1945 Trace Evidence Claire Chun		25
26	27	28			
	1745-1945 Trace Evidence Claire Chun				

March 2001

March 2001							April 2001						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
4	5	6	7	8	9	10	1	2	3	4	5	6	7
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18	19	20	21	22	23	24	15	16	17	18	19	20	21
25	26	27	28	29	30	31	22	23	24	25	26	27	28
							29	30					

Monday	Tuesday	Wednesday	Thursday	Friday	Sat/Sun
			March 1 17-45-19-45 Drug Ident. Judy Christensen		
5	17-45-19-45 Drug Ident. Judy Christensen	6	7	8	9
			17-45-19-45 Drug Ident. Quiz 4 Judy Christensen		
12	17-45-19-45 Drug Ident. Judy Christensen	13	14	15	16
			17-45-19-45 Drug Ident. Judy Christensen		
19	17-45-19-45 FINAL EXAM Jim Josey	20	21	22	23
26	27	28	29	30	31