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 Tool Mark 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 in **100 points**.

A = 500-450 points

B = 449-400 points

C = 399-350 points

D = 349-300 points

CLASS DATES AND TIMES

1/8/02 -3/19/02

Tuesdays & Thursdays

5:45p – 7:50p

INSTRUCTORS

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CLASS SCHEDULE

DATE	TOPIC	INSTRUCTOR	READING
1/8/02	**Introduction to Forensic Science**	Jim **JOSEY**	Chapter 1
1/10/02	**Questioned Documents** Identification of Handwriting Methods of obtaining specimens	Jim **JOSEY**	Chapter 16 & Handouts
1/15/02	Identification of Handwriting	Jim **JOSEY**	
1/17/02	Identification of Paper, Writing Instruments, Inks, Typewriting Photocopiers and Computer Generated Documents	Jim **JOSEY**	
1/22/02	**Quiz 1** (50 points) Restoration of Obliterated and Erased Writings, Unusual Questioned Document problems	Jim **JOSEY**	
1/24/02	**Footwear and Tire Print Identification** Recovery Techniques Types of Comparisons Preparing Known Specimens Comparison Procedures Types Opinions	Jim **JOSEY**	Pages 492-499
1/29/02	**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
1/31/02	**Quiz 2** (50 points) Serial Number Restoration Toolmark Identification Misc. examinations	Curtis **KUBO**	

2/5/02	**Introduction To Trace Evidence Analysis** Inorganic Analysis	Tracy **TANAKA** Claire **CHUN**	Chapter 6
2/7/02	The Microscope Hair Examinations	Tracy **TANAKA** Claire **CHUN**	Chapters 7 & 8
2/12/02	Fiber Examinations	Tracy **TANAKA** Claire **CHUN**	Chapter 8
2/14/02	**Quiz 3** (50 points) Paint Examinations	Tracy **TANAKA** Claire **CHUN**	Chapter 8
2/19/02	Glass Examinations	Tracy **TANAKA** Claire **CHUN**	Chapter 4
2/21/02	Gunshot Residue and Explosives Examination	Tracy **TANAKA** Claire **CHUN**	Chapters 11 & 15
2/26/02	Fire Debris Examinations	Tracy **TANAKA** Claire **CHUN**	Chapter 11
2/28/02	**Introduction to Drug Identification** Chromatography Methods	Judy **CHRISTENSEN**	Chapter 5
3/5/02	Spectrometry Methods Mass Spectrometry	Judy **CHRISTENSEN**	Chapter 5
3/7/02	**Quiz 4** (50 points) Class of Controlled Substances	Judy **CHRISTENSEN**	Chapter 9
3/12/02	Controlled Substances (cont'd)	Judy **CHRISTENSEN**	Chapter 9
3/14/02	Techniques used in Drug Identification	Judy **CHRISTENSEN**	Chapter 9
3/19/02	**FINAL EXAM** (200points) Cumulative	Jim **JOSEY**	