QUESTIONED DOCUMENT EXAMINATION

CREDIT DISTRIBUTION, ELIGIBILITY AND PRE-REQUISITES OF THE COURSE

Course title and Code	Credits	Credit distribution of the course			Eligibility Criteria	Prerequisite of the Course (if any)
		Lecture	Tutorial	Practical/Practice		
Questioned Document Examination	2	0	-	2	XII Passed with Science	Nil

1. Learning Objectives

The Learning Objectives of this course are as follows:

- Introduce students to the importance of questioned documents and their significance in forensic science, highlighting the various types of documents that can be contested, such as signatures on crucial documents, handwriting alterations, and forgeries in written materials
- To familiarize students with the different techniques and methods used in document examination, including handwriting analysis, ink analysis, and paper analysis, while also exploring the role of instrumental tools (e.g., UV light, infrared spectroscopy) in the investigation of questioned documents

2. Learning Outcomes

The Learning Outcomes of this course are as follows:

- Students will become familiar with forged documents and understand the different types of documents and materials that can be classified as such.
- Students will learn to identify and explain the various techniques used in questioned document examination, including both traditional methods and advanced technological tools.
- Students will critically assess the role of forensic document examiners in the legal context and gain an understanding of how their findings can impact judicial decisions.

3. Main Course Structure

Wherever wet lab experiments are not possible the principles and concepts can be demonstrated through any other material or medium including videos/virtual labs etc.

Unit I: Fundamental characteristics of handwriting and their role in individualization

(6 Weeks/ 24 Hours)

- **Laboratory 1**: To analyze and compare the characteristic features of handwriting
- **Laboratory 2**: To examine natural variations in handwriting
- **Laboratory 3-4**: Comparison of known handwriting samples with questioned documents, focusing on consistency in formation, pressure, speed, and slant using specialized scanners
- **Laboratory 5**: To detect intentional corrections, modifications, alterations, or changes in forged documents
- **Laboratory 6**: To review and discuss the case studies related to forged handwritten document

Unit II: Forgeries in special documents **(3 Weeks/ 12 Hours)**

- **Laboratory 7**: To identify security features in currency notes, mark sheets, passports, and degree certificates
- **Laboratory 8**: To review and discuss case studies related to document forgeries, including fake currency, passports and educational documents

Unit III: Analysis of documents using both destructive and non-destructive methods through various tools and techniques. **(6 Weeks/24 Hours)**

- **Laboratory 9**: Analysis of various types of paper and ink using thin layer chromatography and spectrophotometry
- **Laboratory 10**: Microscopic and digital examination of unique paper features, such as thickness, fiber structure, and composition
- **Laboratory 11**: Comparative analysis of forged and known paper samples using the aforementioned paper characteristics

- **Laboratory 12**: Review and discussion of case studies that utilize the techniques covered in the previous labs

4. Teaching Methodology/Activities in the Classroom

Content presentations, virtual labs/videos, hands-on sessions and case study discussions

5. Assessment Patterns for each Unit/practical.

Unit 1:

- Assessment will focus on the various methods and techniques discussed for detecting document forgeries. Students will be evaluated on their understanding and ability to write about the different identification methods effectively (15 marks).
- Assessment will be based on the student's hands-on performance during the practical session, including the experiment execution and the outcomes observed. A viva/test will also be conducted to evaluate the student's understanding of the practical concepts (10 marks).
- Assessment will focus on the properties of various types of documents and paper covered in the unit. Students will be evaluated on their understanding of these properties and their application in document analysis (10 marks).

Unit II:

- Students will present case studies relating to different types of currency notes, identity documents, or other forms of evidence. The assessment will be based on the selection of cases, the depth and relevance of content, and the clarity of the presentation style (20 marks).

Unit III:

- Students will be assessed on their understanding and application of procedures used to identify ink samples on questioned documents. The assessment will focus on the detailed steps involved in the identification process and the accuracy of the student's explanation of the method (10 marks)

Viva (5 marks)

Practical Record/File (10 marks)

6. Mapping with the next suggestive course

Death and Injury

7. Prospective Job Roles after a particular course

Skill enhancement increases employability and credibility, providing an edge in both private and governmental sectors. Students can enter fields like crime scene investigation, forensic graphology and document analysis.

8. Essential Reading

- Forensic Science: From the Crime Scene to the Crime Lab" by Richard Saferstein (2017) Publisher: Pearson, ISBN-13: 978-013429229.
- Forensic Science: An Introduction to Scientific and Investigative Techniques" by Norman J. Nordby (2013) by CRC Press, ISBN-13: 978-1466515570
- Forensic Document Examination: A Desk Reference" by Max M. Willis (2004) CRC Press, ISBN-13: 978-0849307244

9. Suggestive Reading

- Scientific Examination of Questioned Documents" by James E. Starrs and R. D. MacDonald (2001), CRC Press, ISBN-13**:** 978-0849301457
- Forensic Handwriting Examination: A Definitive Guide" by Peter M. De Forest (2002) CRC Press, ISBN-13**:** 978-0849308432

10. Examination scheme and mode

Evaluation scheme and mode will be as per the guidelines notified by the University of Delhi from time to time.