

Course Syllabus Gyanmanjari Science College Semester-2(M.Sc)

Subject: Practical—MSCFS11506

Type of course: Major

Prerequisite: Students should have basic knowledge of separation techniques..

**Rationale**: It teaches them the new methodology of a scientific experiment. It allows students to learn forensic in different ways.

## **Teaching and Examination Scheme:**

Teaching Scheme			Credits	Examination Marks					
CI	Т	P	P C Theory Marks		y Marks	Practical Marks		CA	Total Marks
				ESE	MSE	V	Р	ALA	
0	0	12	6	00	00	40	80	30	150

Legends: CI-Class Room Instructions; T – Tutorial; P - Practical; C – Credit; ESE - End Semester Examination; MSE- Mid Semester Examination; V – Viva; CA - Continuous Assessment; ALA- Active Learning Activities.

### **Continuous Assessment:**

Sr. No	Active Learning Activities	Marks		
1.	JOURNAL Unit wise practical will be given by faculty and students will prepare a journal for the practical.			
	30			



# **List of Practicals:**

Sr. No.	Descriptions	Hrs
I	<ol> <li>Questioned Documents</li> <li>Identification of Handwriting as Individual Characteristics.</li> <li>Study of natural variations and fundamental divergences in handwriting.</li> <li>Comparison of handwritings.</li> <li>Detection of Simulated forgery.</li> <li>Detection of traced forgery.</li> <li>Study of Disguise in handwriting.</li> <li>Comparison of Typewritten scripts</li> <li>Currency note examination</li> </ol>	60
II	Fingerprints  1. To obtain Plain and rolled inked finger prints.  2. To identify the finger Print Patterns.  3. To perform Ridge tracing and Ridge counting.  4. To identify the Ridge characteristics (Minutia).  5. To compare the finger Prints.  6. To develop latent finger Prints with powdering methods.  7. To develop latent finger Prints with fuming methods.  8. To develop latent finger Prints with chemical methods	60
III	<ol> <li>Crime Scence Management</li> <li>Report Writing in respect of crime scene.</li> <li>Photography of Crime Scence.</li> <li>Methods for Searching of Physical Evidences at Scene of Crime.</li> <li>Sketching of Outdoor Scene of Crime (Homicide or Suicide).</li> <li>Sketching of Outdoor Scene of Crime (Accident).</li> <li>Sketching of Indoor Scene of Crime (Theft or Robbery).</li> <li>Sketching of Indoor Scene of Crime (Murder or Suicide).</li> <li>Collection, Packing, Labeling and Forwarding of Physical Evidence from Scene of Crime to Forensic Science Laboratory.</li> </ol>	60
	TOTAL	180



Distribution of Theory Marks								
(Revised Bloom's Taxonomy)								
Level	Remembrance	Understanding	Application	Analyze	Evaluate	Create		
	(R)	(U)	(A)	(N)	(E)	(C)		
Weightage	20%	40%	30%	10%		-		

Note: This specification table shall be treated as a general guideline for students and teachers. The actual distribution of marks in the question paper may vary slightly from above table.

### **Instructional Method:**

The course delivery method will depend upon the requirement of content and need of students. The teacher in addition to conventional teaching method by black board, may also use any of tools such as demonstration, role play, Quiz, brainstorming, MOOCs etc.

From the content 10% topics are suggested for flipped mode instruction.

Students will use supplementary resources such as online videos, NPTEL/SWAYAM videos, ecourses, Virtual Laboratory

The internal evaluation will be done on the basis of Active Learning Assignment.

Practical/Viva examination will be conducted at the end of semester for evaluation of performance of students in laboratory.

#### **Reference Books:**

- 1. Guide to Forensic Investigation, J. K. Kaushik, Gaurav Kaushik, Selective & Scientific Book
- 2. Forensic Document Examination: Principles and Practice, Katherine Koppenhaver, Humana Publication
- 3. Fingerpring Evidence, M L Bhargava, Kamal Publishers (Lawmann's)

