

JAMSHEDPUR WOMEN'S UNIVERSITY

CERTIFICATE COURSE IN FORENSIC SCIENCE

(1 Year Program)

ADMISSION INFORMATION

INTRODUCTION

Forensic science is a vital instrument for the detection or investigation of crime and the administration of justice, providing crucial information about the evidence found at crime scene; Forensic Experts work both at the crime scene and in the laboratory often must be used in court, it is especially important that the training and education of forensic scientists provide a solid scientific background and a broad base in criminalistics. The validity of those results depends on the knowledge, skills, and experience of the forensic scientists working to obtain them. A forensic scientist must be capable of integrating knowledge and skills in the examination, analysis, interpretation, reporting, and testimonial support of evidence.



Sl.No	Information	Dates
1.	Eligibility for Admission	Bachelor Degree with any stream, Preference Given to B.Sc. Biotechnology, B.Sc. Microbiology , B.Sc. Home Science , B.Sc. Botany , B.Sc. Zoology and B.Sc. Chemistry with 45% Marks
2.	Fee structure	Rs 15,000 /- Per semester
3.	Course Duration	2 Semesters

One Year Certificate Course in

Forensic Science

Duration – 1 year (2 SEM)

**Eligibility – A candidate must have passed 10+2
with Science from recognized Board**

Fees – 3000

Syllabus:

**Marks 100 =50 Theory+50 Practical (20 Assignment
+30 Practical)**

Unit 1

Crime: Definition of crime, history and development, victimology, criminological perspective, characteristics of crime, classification of crimes: atrocity, seriousness, motive, statistical, situational & systematic. White collar crime, professional crime, organized crime, present scenario of crime in India.

Criminal and Criminology: Definition of criminal, classification of criminals. Definition of criminology, growth of criminology in India, conservative criminology, liberal criminology, radical criminology.

Unit 2

History and development of Forensic Science- Specific contribution of scientists in the Field of Forensic Science. Development of Forensic Science in India. National and International scenario of teaching and research institution in Forensic Science.

Unit 3

Basic of Forensic Science: Introduction, Definition, need, signification and scope of Forensic Science. Principles of Forensic Science, multi professional and multi personal Aspects of forensic science.

Domains in Forensic Science: Forensic Biology, Forensic Medicine, Forensic Toxicology, Forensic Osteology and Odontology, Forensic Physics, Forensic Photography, Ballistics, Fingerprint, Questioned Documents, Forensic Psychology, Forensic Anthropology, Wild life Forensic, DNA profiling, Computer Forensic etc., Problem of proof in Forensic Science. Ethical issue in Forensic Science: Definition of ethics.

Visit to National and International Forensic Science

Laboratories. Practical

1. Introduction to Forensic lab apparatus and instruments (Microscope, Autoclave, Hot air oven, incubator, pH)
2. Meter, colorimeter, centrifuge, Laminar air flow
3. Collection, preservation, handling, physical evidence method of different Crime
4. To compare physical evidence (Cloth, Thread)
5. Examination of Bomb Blast Scene
6. To collect and compare physical evidence of Hit and run crime scene Samples.

- 7. Packaging and forwarding of physical evidences.**
- 8. TLC/paper chromatography: Qualitative separation of mixture of dyes Using cyclohexane and ethyl acetate (8.5:1.5).**

2nd SEM

Marks 100 =50 Theory+ 50 Job Training Project Practical)

Unit 1

Organization set up of Forensic Science Laboratory: Structure and function of State and regional Forensic Science Laboratory, Central Forensic Science Laboratory and facility provided, Mobile Forensic Science Laboratory. Directorate of Forensic Science Service. Police and Forensic scientist relationship, role of FSL in criminal investigation, relationship between forensic expert and judiciary officer, Importance of FSL, National and International scenario of FSL, facilities provided in forensic science laboratory.

Criminal behavior: Introduction of criminal behavior, theories of criminal behavior: classical and non-classical theories, biological theories, physiological theories, psychogenic theory, economic theory, geographical theories, and sociological theories

Unit 2

Crime detection agency : Organization set up and functioning of Government Examine , Central Forensic Institute, Fingerprint Bureau, National Crime record Bureau, National Institute of Criminology and Forensic science, Crime Investigation department, Central Bureau of Investigation, National Police Academy, National Investigation Agency , World Anti-Doping Agency, National Drug Testing Laboratory, Centre for Cellular and Molecular Biology, Intelligence Bureau, Research Analysis Wing, Bureau of Police Research & Development, Defense Research and Development Organization, Central Police Organization, Central Detective Training School, Fingerprint Bureau Investigation, Crime Investigation Agency, Crime Scene Investigation etc.

Unit 3

Crime scene investigation: Definition of crime scene, crimes without scene. Classification of crime scene: indoor & outdoor, primary & secondary, macroscopic & microscopic crime scene. Significance of crime scene, argument and ethics of crime scene. Definition of physical evidence, classification of physical evidence, types of physical evidences, sources of physical evidence, signification and value of physical evidence, linkage between crime scene, victim and criminal, study of some special crime scene such as mass disaster, terror attack, geological scene and explosive etc.

Unit 4

Crime scene management: Introduction to crime scene management, duties of first responding officer at the scene of crime, duties of crime scene investigator, specialized personnel at the crime scene: biological or chemical terrorist crime scene, processing of scene of crime: plan of action, protection of scene of crime, photography and video recording of crime scene, sketching of crime scene, searching, collection, preservation, packing of physical Evidence, documentation of crime scene.

One month job training Project in National and International Forensic Science Laboratories.