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**BENGALURU
CITY UNIVERSITY**

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No.BCU/BoS/Crimi & Fore- Sci.-UG/181/2025-26

Date: 20.08.2025

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NOTIFICATION

Sub: B.A./B.Sc. III & IV Semesters Criminology & Forensic
Science Syllabus of Bengaluru City University-reg.

Ref: 1. Recommendations of Board of Studies in the
Criminology (UG)
2. Academic Council resolution No.02 dated. 09.07.2025
3. Approval of the Vice-Chancellor dated.20.08.2025

In pursuance of the recommendation in the BoS in Criminology (UG), resolution of the Academic Council cited at ref (2) above and with the approval of the Vice-Chancellor, the Syllabus of B.A./B.Sc. III & IV Semester Criminology & Forensic Science subject is hereby notified for information of the concerned. This Syllabus will be effective from the academic year 2025-26.

The copy of the Syllabus is notified in the University Website: www.bcu.ac.in for information of the concerned.

REGISTRAR

To:

The Registrar (Evaluation), Bengaluru City University, Bengaluru.

Copy to;

1. The Dean, Faculty of Science, BCU.
2. The Chairman & Members of BoS in Criminology(UG), BCU.
3. The P.S. to Vice-Chancellor/Registrar/Registrar (Evaluation), BCU.
4. Office copy / Guard file / University Website: www.bcu.ac.in



BENGALURU CITY UNIVERSITY

CHOICE BASED CREDIT SYSTEM

(As per SEP)

Syllabus for III & IV Semester B.A/B.Sc. Criminology & Forensic Science

2025-26 onwards

ANNEXURE-I

BENGALURU CITY UNIVERSITY, BENGALURU
PROFORMA OF INSTRUCTION AND EXAMINATION
UNDER STATE EDUCATION POLICY SEMESTER SYSTEM (SEP) and
CONTINUOUS ASSESSMENT GRADING PATTERN (CAGP) OF THE OPTIONAL

SUBJECT: CRIMINOLOGY and FORENSIC SCIENCE (B.A/B.Sc PROGRAMME)
DURATION OF THE COURSE: 03 YEARS (06 SEMESTER)

B. A/B.Sc. I YEAR (I and II SEMESTER)

Semesters	Course	Title the Paper	Instruction Hours (L:T:P)/Week	Credit	Duration of Exam (Hours)	Marks		Total Marks
						Formative Assessment/ IA	Summative Assessment	
I	DSC-1T. (Theory)	PRINCIPLES OF CRIMINOLOGY	3:1:0	03	03	20	80	100
	DSC-1P. (Practical)	PRACTICAL - 01	0:0:4	02	03	10	40	50
II	DSC-2T. (Theory)	FUNDAMENTALS OF FORENSIC SCIENCE	3:1:0	03	03	20	80	100
	DSC-2P. (Practical)	PRACTICAL- 02	0:0:4	02	03	10	40	50

Semesters	Course	Title the Paper	Instruction Hours (L:T:P)/Week	Credit	Duration of Exam (Hours)	Marks		Total Marks
						Formative Assessment/ IA	Summative Assessment	
III	DSC-3T. (Theory)	POLICE SCIENCE AND CRIMINAL INVESTIGATION	3:1:0	03	03	20	80	100
	DSC – Elective -1 (any one)	i) POLICE ORGANISATIONS IN INDIA & THEIR DUTIES	2:0:0	02	1.5	10	40	50
		ii) SOCIAL PROBLEMS AND CRIME						
	DSC-3P. (Practical)	PRACTICAL - 03	0:0:4	02	03	10	40	50
IV	DSC-4T. (Theory)	FORENSIC PSYCHOLOGY AND CRIMINAL PROFILING	3:1:0	03	03	20	80	100
	DSC – Elective -1 (any one)	i) ELEMENTS OF FORENSIC SCIENCE	2:0:0	02	1.5	10	40	50
		ii) CYBER CRIMES AND CYBER LAW						

	DSC-4P. (Practical)	PRACTICAL - 04	0:0:4	02	03	10	40	50
V	DSC-5T. (Theory)	CRIMINAL JUSTICE RESPONSES: CORRECTIONS, JUVENILES, VICTIMS AND RIGHTS (COMPULSORY PAPER)	3:1:0	03	03	20	80	100
	DSC-6T. (Theory)	MEDICAL JURISPRUDENCE AND TOXICOLOGY	3:1:0	03	03	20	80	100
	DSC-7T. (Theory)	DIGITAL FORENSICS AND CYBERCRIME	3:1:0	03	03	20	80	100
	DSC-5P. (Practical)	PRACTICAL -05 (MEDICAL JURISPRUDENCE AND TOXICOLOGY)	0:0:4	02	03	10	40	50
	DSC-6P. (Practical)	PRACTICAL – 06 (DIGITAL FORENSICS AND CYBERCRIME)	0:0:4	02	03	10	40	50
VI	DSC-8T. (Theory)	CORPORATE AND TRANSNATIONAL CRIMES (COMPULSORY PAPER)	3:1:0	03	03	20	80	100
	DSC-9T. (Theory)	FORENSIC DACTYLOSCOPY AND DNA FINGERPRINTING	3:1:0	03	03	20	80	100
	DSC-10T. (Theory)	FORENSIC PHOTOGRAPHY FORENSIC	3:1:0	03	03	20	80	100
	DSC-7P. (Practical)	PRACTICAL- 07 (EXAMINATION OF FINGERPRINTS AND FOOTPRINTS)	0:0:4	02	03	10	40	50
	DSC-8P. (Practical)	INTERNSHIP WITH REPORT AND PRESENTATION (COMPULSORILY) ON AREAS & TOPICS: A. Law Enforcement & Policing B. Correctional Institutions C. Forensic Laboratories	0:0:4	02	03	10	40	50

		D. Courts & Legal System E. NGOs / Human Rights Organizations D. Cyber Crime Cells F. Research Institutes & Think Tanks G. Private Forensic & Investigation Firms						
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*Discipline Specific Course.

B.A/B.Sc CRIMINOLOGY and FORENSIC SCIENCE

Name of the Degree: **B.A/B.Sc.**

Name of the Program: **CRIMINOLOGY and FORENSIC SCIENCE**

Discipline Core: **CRIMINOLOGY and FORENSIC SCIENCE**

PROGRAM OUTCOMES

By the end of the program the students will be able to:

- a) Demonstrate (i) a systematic or coherent understanding of the fundamental concepts, principles and processes underlying the academic field of Criminology and Forensic Science, its application in different subfields (law, Policing, Investigation Techniques, Investigation of Scene of Crime, Penology, Human Rights, Victimology, Criminal Psychology, Security Management and in others allied fields), and its linkages with related disciplinary areas/subjects, (ii) procedural knowledge that creates different types of professionals in the field of Criminology and Forensic Science related fields such as teaching, research and development, private investigations, security industry, victim assistance, non-governmental organizations, juvenile justice system, correctional system, policing, and crime analyst, (iii) skills related to specialization areas within Criminology and Forensic Science as well as within subfields of Criminology and Forensic Science (policing, investigative techniques, crime scene management, penology, victimology, criminal psychology, security management), and other related fields of study, including broader interdisciplinary subfields (forensic science, human rights, gender studies, sociology and law).
- b) Apply appropriate methodologies in order to conduct analysis and detect patterns of crime and victimization and apply relevant knowledge and skills to seek solutions to problems that emerge from the subfields of Criminology and Forensic Science as well as from broader interdisciplinary subfields relating to Criminology and Forensic Science.
- c) Use techniques relevant to academia and industry, generic skills and global competencies, including knowledge and skills that enable students to undertake further studies in the field of Criminology and Forensic Science, its related field and work in the Government and non-Government sectors.

- d) Undertake hands-on field work and practical activities that develop problem- solving abilities required for successful career in research and development, policy-making, teaching, security management, private investigation, disaster management, non-governmental organizations, victim assistance programmes, correctional institutions, after-care programs, criminal justice administration, etc.
- e) Recognize and appreciate the importance of Criminology and Forensic Science, its application in an academic, social, legal, industrial, economic and environmental context.

OVERALL OUTCOMES

Each Course under the Under-Graduate (UG) Programme has a specific design to bring about the learning and acquisition of the skills to the student. Enrichment of the knowledge is aimed as a desired course outcome. The courses are so designed to have interconnectivity to Science, Social Science and Law. Each of the courses will provide the understanding and individualized component will be drawing the student towards a gainful career path in the fields of the Criminal Justice System.

CURRICULUM STRUCTURE WITH PRACTICALS

This matrix lists only the core courses. Core courses list the courses that are essential for every student to earn his degree. It includes all types of courses (theory, lab, tutorial, Project, Internships that every student of the course). Electives are not part of this list.

Semester	Name of the course	What all program outcomes do the course address (not exceeding three per course)	Prerequisite Courses	Concurrent Course#	Pedagogy##	Assessments
1	PRINCIPLES OF CRIMINOLOGY (3+2)	<ol style="list-style-type: none"> 1. A systematic disciplinary knowledge of the fundamental concepts, analytical reasoning, principles, and processes. 2. Apply appropriate methodologies to conduct analytical skills and detect patterns of crime and victimization. 3. Apply moral and ethical awareness/reasoning 	Nil	Nil	<ol style="list-style-type: none"> a. Lecture Method, b. Interactive Sessions c. Activities (Seminar and Assignments, Outdoor learning's, Individual & Group presentation) d. ICT Based (Video-Audio (virtual) Mode and PowerPoint Presentation 	<ol style="list-style-type: none"> a. Semester End Examination (Theory) for 80 Marks. b. *Continuous Internal Evaluation for 20 Marks including (tests, Seminar, assignment/ attendance) c. Semester End Examination (Practical) for 40 marks d. *CIE (Practical) for 10 Marks.
2	FUNDAMENTALS OF FORENSIC SCIENCE (3+2)	<ol style="list-style-type: none"> 1. A systematic understanding of the fundamental concepts, principles of Forensic Science with an interdisciplinary domain 2. Apply appropriate knowledge with reflective thinking and examine the physical clues 3. Apply relevant knowledge and analytical reasoning 			<ol style="list-style-type: none"> a. Lecture Method, b. Interactive Sessions c. Activities (Seminar and Assignments, Outdoor learning's, Individual and Group presentation) d. ICT Based (Video-Audio (virtual) Mode and PowerPoint Presentation 	<ol style="list-style-type: none"> a. Semester End Examination (Theory) for 80 Marks. b. *Continuous Internal Evaluation for 20 Marks including (theory tests, Seminar, assignment/ attendance) c. Semester End Examination (Practical) for 40 marks d. *CIE (Practical) for 10 Marks.

Semester	Name of the course	What all program outcomes do the course address (not exceeding three per course)	Elective Paper	Concurrent Course#	Pedagogy##	Assessments
3	POLICE SCIENCE AND CRIMINAL INVESTIGATION (3+2)	<ol style="list-style-type: none"> 1. A systematic disciplinary knowledge of the fundamental concepts of Police Science, analytical reasoning, and Criminal investigation 2. Apply appropriate methodologies in order to conduct analytical skills and detect patterns of crime, establishing linkage between scene of crime, criminal and victims of crime. 3. Apply moral and ethical awareness/reasoning in detection crime and pertinent physical clues and evidences. 	(Any One) i). Police Organization in India ii) Social Problems and Crime (2)	Nil	<ol style="list-style-type: none"> a. Lecture Method, b. Interactive Sessions c. Activities (Seminar and Assignments, Outdoor learning's, Individual & Group presentation) d. ICT Based (Video-Audio (virtual) Mode and PowerPoint Presentation) 	<ol style="list-style-type: none"> a. Semester End Examination (Theory) for 80 Marks. b. *Continuous Internal Evaluation for 20 Marks including (tests, Seminar, assignment/ attendance) c. Semester End Examination (Practical) for 40 marks d. *CIE (Practical) for 10 Marks.
4	FUNDAMENTALS OF FORENSIC SCIENCE (3+2)	<ol style="list-style-type: none"> 1. Understand about the overview of forensic psychology and its applications along with legal aspects of forensic psychology. 2. Explain the significance of criminal profiling and the importance of psychological assessment in gauging criminal behavior. 3. Describing the tools and techniques required for detection of deception. 4. Understanding the critical assessment of advanced forensic techniques like polygraphy, narco analysis and brain electrical oscillation signatures. 	(Any One) i). Elements of Forensic Science ii) Cybercrimes and Cyber Law(2)	Nil	<ol style="list-style-type: none"> a. Lecture Method, b. Interactive Sessions c. Activities (Seminar and Assignments, Outdoor learning's, Individual and Group presentation) d. ICT Based (Video-Audio (virtual) Mode and PowerPoint Presentation) 	<ol style="list-style-type: none"> a. Semester End Examination (Theory) for 80 Marks. b. *Continuous Internal Evaluation for 20 Marks including (theory tests, Seminar, assignment/ attendance) c. Semester End Examination (Practical) for 40 marks d. *CIE (Practical) for 10 Marks.

5	CRIMINAL JUSTICE RESPONSES: CORRECTIONS, JUVENILES, VICTIMS, AND RIGHTS (COMPULSORY PAPER) (3+2)	<ol style="list-style-type: none"> 1. Understand the structure and functioning of correctional institutions and the theories behind rehabilitation and punishment. 2. Critically examine the juvenile justice system and its rehabilitative approach to young offenders. 3. Evaluate victimological theories, rights of victims, and mechanisms of victim support and compensation. 4. Analyze human rights standards applicable in correctional and juvenile systems, including constitutional and international safeguards. 	Nil	Nil	<ol style="list-style-type: none"> a. Lecture Method, b. Interactive Sessions c. Activities (Seminar and Assignments, Outdoor learning's, Individual & Group presentation) d. ICT Based (Video-Audio (virtual) Mode and PowerPoint Presentation 	<ol style="list-style-type: none"> a. Semester End Examination (Theory) for 80 Marks. b. *Continuous Internal Evaluation for 20 Marks including (theory tests, Seminar, assignment/attendance) c. Semester End Examination (Practical) for 40 marks d. *CIE (Practical) for 10 Marks.
5	MEDICAL JURISPRUDENCE AND TOXICOLOGY (3+2)	<ol style="list-style-type: none"> 1. To understand the basics of Medical Jurisprudence and Toxicology. 2. Demonstrate the medico-legal importance of Death. 3. To familiarize with the poisons and their effects on human body. 4. To Familiarize with autopsy and its importance. 	Nil	Nil	<ol style="list-style-type: none"> a. Lecture Method, b. Interactive Sessions c. Activities (Seminar and Assignments, Outdoor learning's, Individual & Group presentation) d. ICT Based (Video-Audio (virtual) Mode and PowerPoint Presentation 	<ol style="list-style-type: none"> a. Semester End Examination (Theory) for 80 Marks. b. *Continuous Internal Evaluation for 20 Marks including (theory tests, Seminar, assignment/attendance) c. Semester End Examination (Practical) for 40 marks d. *CIE (Practical) for 10 Marks.

5	DIGITAL FORENSICS AND CYBERCRIME (3+2)	<ol style="list-style-type: none"> 1. To understand the concept of digital evidence, collection and preservation of evidence and its significance. 2. To understand the importance of Cyber Security. 3. Demonstrate the methods and techniques, best practices to protect against various kind of cyber- attacks. 4. To familiarize with the application of Cyber laws in general. 			<ol style="list-style-type: none"> a. Lecture Method, b. Interactive Sessions c. Activities (Seminar and Assignments, Outdoor learning's, Individual & Group presentation) d. ICT Based (Video-Audio (virtual) Mode and PowerPoint Presentation 	<ol style="list-style-type: none"> a. Semester End Examination (Theory) for 80 Marks. b. *Continuous Internal Evaluation for 20 Marks including (theory tests, Seminar, assignment/ attendance) c. Semester End Examination (Practical) for 40 marks d. *CIE (Practical) for 10 Marks.
6	CORPORATE AND TRANSNATIONAL CRIMES (COMPULSORY PAPER) (3+2)	<ol style="list-style-type: none"> 1. Understand and explain the key types and causes of corporate and transnational crimes 2. Identify legal provisions and institutions addressing such crimes 3. Analyze case studies using criminological and legal frameworks 4. Develop foundational awareness of global crime networks and cooperation strategies 			<ol style="list-style-type: none"> a. Lecture Method, b. Interactive Sessions c. Activities (Seminar and Assignments, Outdoor learning's, Individual & Group presentation) d. ICT Based (Video-Audio (virtual) Mode and PowerPoint Presentation 	<ol style="list-style-type: none"> a. Semester End Examination (Theory) for 80 Marks. b. *Continuous Internal Evaluation for 20 Marks including (theory tests, Seminar, assignment/ attendance) c. Semester End Examination (Practical) for 40 marks d. *CIE (Practical) for 10 Marks.

6	FORENSIC DACTYLOSCOPY AND DNA FINGERPRINTING (3+2)	<ol style="list-style-type: none"> 1. Understanding the concept of Forensic Dactyloscopy and DNA and its significance. 2. Familiarizing the fundamental principles and Laws of Individuality. 3. To gain insights of crimes, scams and their investigation in Indian context. 4. To understand the forensic importance of Forensic Dactyloscopy and DNA in CJS 			<ol style="list-style-type: none"> a. Lecture Method, b. Interactive Sessions c. Activities (Seminar and Assignments, Outdoor learning's, Individual & Group presentation) d. ICT Based (Video-Audio (virtual) Mode and PowerPoint Presentation 	<ol style="list-style-type: none"> a. Semester End Examination (Theory) for 80 Marks. b. *Continuous Internal Evaluation for 20 Marks including (theory tests, Seminar, assignment/ attendance) c. Semester End Examination (Practical) for 40 marks d. *CIE (Practical) for 10 Marks.
6	FORENSIC PHOTOGRAPHY FORENSIC (3+2)	<ol style="list-style-type: none"> 1. Understand the definition, nature, role of Photography in Criminal Investigation. 2. Familiarizing the importance of Forensic photography as evidence in the Court of law. 3. Explain the basic elements and major scope, types of Forensic Photography 4. Understand the tools and techniques for analyzing the photography as Crime scene Evidences. 			<ol style="list-style-type: none"> a. Lecture Method, b. Interactive Sessions c. Activities (Seminar and Assignments, Outdoor learning's, Individual & Group presentation) d. ICT Based (Video-Audio (virtual) Mode and PowerPoint Presentation 	<ol style="list-style-type: none"> a. Semester End Examination (Theory) for 80 Marks. b. *Continuous Internal Evaluation for 20 Marks including (theory tests, Seminar, assignment/ attendance) c. Semester End Examination (Practical) for 40 marks d. *CIE (Practical) for 10 Marks.

Concurrent course is a core (Lab/Tutorial/Project) course that a student has to take along with this course in the same semester for effective learning. Course design of concurrent courses is preferred to be done by the same team.

Pedagogy for student engagement is predominantly lectures. However, other pedagogies enhancing better student engagement to be recommended for each course. This list includes active learning/course projects/Problem Based or Project-Based Learning/Case Studies/ Self-Study like Seminar, Term Paper or MOOC).

Every course needs to include assessment for higher-order thinking skills (Applying/Analyzing/Evaluating/Creating). However, this column may contain alternate assessment methods that help formative assessment (i.e. Assessment for Learning)

Structure of B.A/B.Sc. Criminology and Forensic Science

Discipline-Specific Core Course (DSCC)

- 1) DSC-1T: PRINCIPLES OF CRIMINOLOGY (3)**
- 2) DSC-1P: PRACTICAL -I (2)**
- 3) DSC-2T: FUNDAMENTALS OF FORENSIC SCIENCE (3)**
- 4) DSC-2P: PRACTICAL -II (2)**
- 5) DSC-3T: POLICE SCIENCE AND CRIMINAL INVESTIGATION(3)**
- 6) DSC – ELECTIVE(any one) (i) Police organization in India /(ii) Social Problems and Crime**
- 7) DSC-3P: PRACTICAL -III (2)**
- 8) DSC-4T: FORENSIC PSYCHOLOGY & CRIMINAL PROFILING (3)**
- 9) DSC – ELECTIVE (any one) (i) Elements of Forensic Science (ii) Cybercrimes & Cyber Law**
- 10) DSC-4P: PRACTICAL -IV (2)**
- 11) DSC-5T: CRIMINAL JUSTICE RESPONSES: CORRECTIONS, JUVENILES, VICTIMS, AND RIGHTS (COMPULSORY PAPER) (3).**
- 12) DSC-6T: MEDICAL JURISPRUDENCE AND TOXICOLOGY(3)**
- 13) DSC-7T: DIGITAL FORENSICS AND CYBERCRIME (3)**
- 14) DSC-5P: MEDICAL JURISPRUDENCE AND TOXICOLOGY Practical -IV (2)**
- 15) DSC-6P: DIGITAL FORENSICS AND CYBERCRIME Practical -IV (2)**
- 16) DSC- 8T: CORPORATE AND TRANSNATIONAL CRIMES (COMPULSORY PAPER)(3)**
- 17) DSC- 9T: FORENSIC DACTYLOSCOPY AND DNA FINGERPRINTING(3)**
- 18) DSC- 10T: FORENSIC PHOTOGRAPHY FORENSIC(3)**
- 19) DSC-7P: EXAMINATION OF FINGERPRINTS AND FOOTPRINTS(2)**
- 20) DSC-8P : INTERNSHIP WITH REPORT AND PRESENTATION(2)**

ASSESSMENT METHOD

Types of Course	Formative Assessment/IA	Summative Assessment	Total
Theory	20	80	100
Practical	10	40	50

Question Paper Pattern:

The Theory Examination will be conducted for 80 Marks and it consists of 03 parts namely short, medium and long answer questions.

Part A-10 Questions of 02 Marks Each = 20

Part B-06 Questions of 05 Marks Each = 30

Part C-03 Questions of 15 Marks Each = 30

BENGALURU CITY UNIVERSITY, BENGALURU

STATE EDUCATION POLICY (SEP)

SEMESTER - I

B.A/B.Sc. CRIMINOLOGY and FORENSIC SCIENCE

Title of the Course: PRINCIPLES OF CRIMINOLOGY - DSC-1T

COURSE TITLE: PRINCIPLES OF CRIMINOLOGY- DSC-1T	
Total Contact Hours: 56	Course Credits: 03
Formative Assessment Marks: 20	Duration of ESA/Exam Hrs: 03
Model Syllabus Authors: BOS	Summative Assessment Marks: 80

Course Pre-Requisite(s): Mention only course titles from the curriculum that are needed to be taken by the students before registering for this course.

COURSE OUTCOMES

At the end of the course, the student should be able to:

- Explain the definition, scope, and basic principles of criminology and describe various theories and techniques used in its application.
- Classify crimes and types of criminals (e.g., white-collar, habitual) and explain their significance in criminology.
- Compare and contrast different schools of criminology and analyze their approaches to understanding criminal behavior.
- Evaluate and differentiate between various crime prevention concepts such as environmental design and police methods.
- Describe the organization, roles, and functions of NCRB, SCRB, and DCRB in crime data management and policy-making.

SEMESTER - I

B.A/B.Sc. CRIMINOLOGY and FORENSIC SCIENCE

Title of the Course: PRINCIPLES OF CRIMINOLOGY - DSC-1T

Number of Theory Credits	Number of Lecture Hours/Semester	Number of Practical Credits	Number of Practical Hours/Semester
03	56	02	56
CONTENT OF THEORY PAPER			
			56 Hrs
Unit – 01: INTRODUCTION TO CRIMINOLOGY			14
Chapter - 01: HISTORICAL PERSPECTIVE <ol style="list-style-type: none"> 1) Etymology, Meaning, Definitions, Nature and Scope of Criminology 2) Historical Development of Criminology 3) Importance of Criminology 4) Interdisciplinary Nature of Criminology and its Relations with other Social Sciences. (Penology, Sociology, Psychology, Victimology, Criminal Law and Forensic Science). Chapter - 02: CONCEPT OF CRIMES and CRIMINAL LAW <ol style="list-style-type: none"> 1) Crime; Meaning, Definitions and Characteristics. 2) Difference between Crime, Sin, Vice and Tort. 3) Classification of Crimes by Pioneers and Indian Law. 4) Criminal Law; Meaning, Definitions and Characteristics (BNS, BNSS BSA) Classification of Crimes & Criminals. 			
Unit – 02: EXPLANATIONS OF CRIME and CRIMINAL BEHAVIOUR			14
Chapter - 03: PRE SCIENTIFIC and CLASSICAL THEORIES <ol style="list-style-type: none"> 1) Schools of Criminology: Meaning and its Importance in Explanation of Crime (Classical School, Neo Classical School, and Positive School) profounder and their contribution 2) Pre-classical school: Religious Leaders and Philosophical thoughts Chapter - 04: SOCIOLOGICAL and SOCIALISTIC THEORY <ol style="list-style-type: none"> 1) Introduction to Sociological Schools & Theories 2) Social Processes Theories. 3) Theory of Imitation. 4) Social Learning Theory - Differential Association 5) Radical Theory – Multi Factor Approach 			
Unit – 03: BIOLOGICAL and CARTOGRAPHIC THEORIES OF CRIME			14
Chapter - 05: TYPOLOGICAL SCHOOLS <ol style="list-style-type: none"> 1) Biological Positivism: Lombrosian, Enrico Ferri, Raffaele Garofalo's concept. 			

2) Mental Testers and Psychiatric Schools. 3) Cartographic School/Theory. Chapter - 06: MODERN THEORIES 1) Containment Theory - Walter Reckless. 2) Sub-Culture Theories. 3) Routine Activity and Rational Choice Theory. 4) Broken Window Theory. Chapter - 07: FORMS OF CRIME, CRIMINALS and CRIMINALITY 1) White Collar Crime, Organized Crime, and Environmental Crime. 2) Habitual Offenders and Professional Criminals. 3) Violent and Aggressive Offenders, Sexual Offenders, Recidivist.	
Unit - 04: MODERN FORMS OF CRIME, CLASSIFICATION and CRIME STATISTICS	14
Chapter - 08: CONTEMPORARY CRIMES 1) Cyber Crimes (Economic and Social Media Offences), Corporate Crimes. 2) Hate Crimes, Gender Violence and Situational Criminality. Chapter - 09: CRIME STATISTICS and CURRENT TREND 1) Crime statistics: Meaning and Its Importance. 2) National Crime Records Bureau (NCRB), State Crime Records Bureau (SCRB) and District Crime Records Bureau (DCRB). 3) Crime/Victim Surveys: International Crime Comparisons, Changing Crime Patterns and Unreported Crime.	

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3. Theju Kumar C, Vaishnanvi V Sawant, Swapna Gowri, (2024). *Introduction to Criminology & Forensic Science*, Current Publication.
4. Hagan, F. (2017). *Introduction to Criminology* (9th ed.). Los Angeles: SAGE.
5. Harry E., Friday, P., Roebuck, J., & Edward, S. (1981). *Crime and punishment: An introduction to Criminology*. New York: Free Press.
6. Hughes, G. (2002). *Crime prevention and community safety: New directions*. London: Sage.

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10. Sutherland, E. H., & Cressey, D. R. (1974). *Principles of Criminology*. Philadelphia, PA: Lippincott.
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12. Ram Ahuja (2000) *Criminology*, Rawat Publications
13. Paranjape N.V (2015) *Criminology, Penology and Victimology* Sixteenth edition, Central Law Publications

JOURNALS

1. *Criminology* ISSN:1745-9125
2. *International Criminology*, Springer.
3. *Asian Journal of Criminology*, Springer.

DIGITAL REFERENCES

1. <https://onlinelibrary.wiley.com/journal/17459125>
2. <https://www.longdom.org/scholarly/criminology--journals-articles-ppts-list-3079.html>
3. <https://scholarlycommons.law.northwestern.edu/jclc/>
4. <http://www.inquiriesjournal.com/topics/16/criminology-and-criminal-justice>
5. <https://psycnet.apa.org/record/1958-04359-000>
6. <https://journals.sagepub.com/doi/abs/10.1177/1362480607075851>
7. <http://ecite.utas.edu.au/130268>
8. <https://eprints.qut.edu.au/198603/>
9. <https://www.jstor.org/stable/1140864>
10. <https://www.jstor.org/stable/23638473>
11. <https://www.mha.gov.in/en/commoncontent/new-criminal-laws>

PEDAGOGY: Lecture, Assignments, Interactive Session, ICT and Group Discussion.

Formative Assessment 40 (Theory Tests, Activities/Assignment/Seminar and Attendance)	
Assessment Occasion/Type	Weightage in Marks
Theory Test (C1)	10
Activity/Seminar/Presentation Assignment/ Case Study/Field Work/Project Work (C2)	05+05=10
Total	20

SEMESTER - I

Content of Practical Course DSC-1P

Credits: 02. Marks; 10+40=50

10 Students per Batch

1. Analysis of news items of criminology importance from the daily news papers.
2. Collection of Crime News Clippings
3. Pioneers of classical and positive criminology with their contributions.
4. Compression and Analysis of Crimes Reported in Two NEWS Papers published on the same Day and Date.
5. Identification and Classification of Cyber-Crimes reported in the NEWS Papers.
6. Crime Statistics Analysis;
 - a) Crime against Person
 - b) Crime against Property
7. Study of Graphical Representation of Crime Statistics
8. Kim's Game: Observation, Retention, Memory and Interpretation

SEMESTER - II

B.A/B.Sc. CRIMINOLOGY and FORENSIC SCIENCE

Title of the Course: FUNDAMENTALS OF FORENSIC SCIENCE - DSC-2T

Course Title: FUNDAMENTALS OF FORENSIC SCIENCE. DSC-2T	
Total Contact Hours: 56	Course Credits: 03
Formative Assessment Marks: 20	Duration of ESA/Exam Hrs: 03
Model Syllabus Authors: BOS	Summative Assessment Marks: 80

Course Pre-requisite(s): Mention only course titles from the curriculum that are needed to be taken by the students before registering for this course.

COURSE OUTCOMES

At the end of the course the student should be able to:

- Understand the Definition, Scope and Basic Principles of Forensic Science, exhibit the various Tools and Techniques utilized in the application of the Subject.
- Explain the Significance of Evidence, Types and Classification of Physical Evidence such as Blood, Fiber, Paint, Firearms, Fingerprints, etc.
- Examine the Forensic Documents, Tools and Techniques employed types of Forgeries, Types of Handwriting and its Characteristics, etc.
- Explain the basic Principles and Stages involved in Crime Scene Reconstruction.
- Describe the Scope and Importance of Medical Evidence such as Oral and Documentary, etc.
- Importance of Medico-Legal autopsy and Type and Characteristics of Wounds, etc.

SEMESTER - II

B.A/B.Sc. CRIMINOLOGY and FORENSIC SCIENCE

Title of the Course: FUNDAMENTALS OF FORENSIC SCIENCE - DSC-2T

Number of Theory Credits	Number of Lecture Hours/Semester	Number of Practical Credits	Number of Practical Hours/Semester
03	56	02	56
CONTENT OF THEORY PAPER			56 Hrs
Unit - I: INTRODUCTION – FORENSIC SCIENCE			14
Chapter - 01: 1) Etymology, Meaning, Definitions and Branches of Forensic Science 2) Nature, Scope and Importance of Forensic Science Chapter - 02: 1) Historical Development and Contribution of Pioneers. 2) Principles of Forensic Science, Tools and Techniques & Role of Forensic Science in Investigation of Crimes.			
Unit - II: FORENSIC SCIENCE LABORATORIES and EVIDENCE			14
Chapter - 03: Forensic Science Laboratories of State and Central Institutions. Chapter - 04: Role of Scene of Crime Officers (SOCO) and Forensic Experts. Chapter - 05: Physical Evidence: Examination of Glass, Paint, Soil and Cloth. Chapter - 06: Biological Evidence: Hair, Fiber, Blood and Semen. Chapter -07: Impression Evidence: Finger print, Foot Print, Palm Print, Lip Print, Ear Print.			
Unit - III: FORENSIC DOCUMENT EXAMINATION			14
Chapter - 07: 1) Forensic Document Examination: Meaning, Types of Documents and Tools for Examination. 2) Characteristics of Handwriting and Signature and Their Comparison.			

Chapter - 08: Forgeries - Types and Methods of their detection (includes Indian Currency Notes).	
Unit - IV: Forensic Ballistics and Tool Marks	14
Chapter - 09: Forensic Ballistics - Introduction to Concepts and Medico Legal Importance of Firearms in Criminal Investigation, Chapter - 10: Examination of Cartridge Case and Bullets, Firearm and Range of Firing. Chapter - 11: Tool Marks - Types and Method of Lifting.	

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2. Theju Kumar C, Vaishnavi V Sawant, Swapna Gowri, (2024). *Introduction to Criminology & Forensic Science*, Current Publication.
3. Gardner, R., & Bevel, T. (2009). Practical crime scene analysis and reconstruction. Boca Raton, FL: CRC Press.
4. Lewis, J. (2014). Forensic document examination. New York: Academic Press.
5. Nanda, B., & Tewari, R. (2001). Forensic science in India: A vision for the twenty- first century. New Delhi: Select Publishers.
6. Subrahmanyam, B. (2001). Modi's medical jurisprudence & Toxicology. New Delhi: Butterworth India.
7. Turvey, B., & Crowder, S. (2017). Forensic investigations – an Introduction. Academic Press.
8. Young, T., & Ortmeier, P. (2010). Crime scene investigation. Pearson.

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1. Indian Journal of Criminology and Criminalistics, ISSN: 0970-4345
2. International Journal of Forensic and Legal Medicine, ISSN: 1752-928X
3. Journal of Forensic Pathology, ISSN: 2684-1312

DIGITAL REFERENCE

1. <https://books.google.co.in/books?hl=en&lr=&id=zIRQOssWbaoC&oi=fnd&pg=PA1&dq=forensic+science+research+articles&ots=wJ-Zt0UQ2U&sig=v7wufZJrViWiMCo3YwG8d0sguCc>
2. <https://link.springer.com/article/10.1007%2Fs10657-005-4196-6#citeas>
3. <https://www.ojp.gov/ncjrs/virtual-library/abstracts/forensic-science-handbook-volume-2>
4. https://books.google.co.in/books?hl=en&lr=&id=cuTnMnlvZMC&oi=fnd&pg=PP1&dq=forensic+science+research+articles&ots=dGYy_obgyD&sig=pRc8BvVP4AOrw5E7vfCfwhoWFR8
5. https://books.google.co.in/books?hl=en&lr=&id=wK9c4KttXj0C&oi=fnd&pg=PP1&dq=forensic+science+research+articles&ots=b3wV8PRtsy&sig=t1DV5xrKLcUCPwYOBSkxYQW8_JI

PEDAGOGY: Lecture, Assignments, Interactive Session, ICT and Group Discussion.

Formative Assessment 40 (Theory Tests, Activities/Assignment/Seminar and Attendance)	
Assessment Occasion/Type	Weightage in Marks
Theory Test	10
Activity/Seminar/Presentation Assignment/Case Study/Field Work/Project Work (C2)	05+05=10
Total	20

SEMESTER - II

Content of Practical Course DSC-2P

Credits: 02. Marks; 10+40=50

10 Students per Batch

List of Experiments to be Conducted

1. Examination of Hair (Animal and Human Hair)
2. Examination of Glass Fractures for its Nature and Direction of Force
3. Identification and Recording of Finger Print Patterns.
4. Examination of Questioned Documents; Comparison of Hand Written Documents.
5. Examination of Currency Notes to determine its nature by the Characteristics.
6. Examination and Identification of Bullets and Cartridge Case.
7. Determination of Type of Fiber by Physical Test and Microscopic Test.
8. Examination of Fabric; Tears and Mechanical fit (Cotton, Nylon, Rayon, Polyester)

BENGALURU CITY UNIVERSITY, BENGALURU

STATE EDUCATION POLICY (SEP)

SEMESTER - III

B.A/B.Sc. CRIMINOLOGY and FORENSIC SCIENCE

Title of the Course: Police Science and Criminal Investigation - DSC-3T

COURSE TITLE: PRINCIPLES OF CRIMINOLOGY- DSC-1T	
Total Contact Hours: 56	Course Credits: 03
Formative Assessment Marks: 20	Duration of ESA/Exam Hrs: 03
Model Syllabus Authors: BOS	Summative Assessment Marks: 80

Course Pre-Requisite(s): Mention only course titles from the curriculum that are needed to be taken by the students before registering for this course.

COURSE OUTCOMES

At the end of the course, the student should be able to:

- Demonstrate (i) a systematic or coherent understanding of the fundamental concepts, principles and processes underlying the academic field of Criminology and Forensic Science, its application in different subfields (law, Policing, Investigation Techniques, Investigation of Scene of Crime, Penology, Human Rights, Victimology, Criminal Psychology, Security Management and in others allied fields), and its linkages with related disciplinary areas/subjects; (ii) procedural knowledge that creates different types of professionals in the field of Criminology and Forensic Science related fields such as teaching, research and development, private investigations, security industry, victim assistance, non-governmental organizations, juvenile justice system, correctional system, policing, and crime analyst; (iii) skills related to specialization areas within Criminology and Forensic Science as well as within subfields of Criminology and Forensic Science (policing, investigative techniques, crime scene management, penology, victimology, criminal psychology, security management), and other related fields of study, including broader interdisciplinary subfields (forensic science, human rights, gender studies, sociology and law).
- Develop the knowledge regarding the Police Administration, Enforcement of Laws of the nation, Maintaining the Law and Order.
- Understanding the various challenges faced by police in their day to day policing.
- Become aware about the different types of crime scenes, investigations and their related legal procedures.

SEMESTER - III

B.A/B.Sc. CRIMINOLOGY and FORENSIC SCIENCE

Title of the Course: POLICE SCIENCE & CRIMINAL INVESTIGATION - DSC-3T

Number of Theory Credits	Number of Lecture Hours/Semester	Number of Practical Credits	Number of Practical Hours/Semester
03	56	02	56
CONTENT OF THEORY PAPER			56 Hrs
Unit – 01: INTRODUCTION TO POLICE SCIENCE			14
Chapter - 01: Police administration in India <ol style="list-style-type: none">1. Role of Police in Independent India, Constitutional provisions regarding policing in India2. Role of Police in International level Chapter-2 Policing in present scenario. Chapter - 02: Introduction to various styles of Policing <ol style="list-style-type: none">1. Ethics in Policing2. Technology and policing3. Short comings of policing4. Police recruitment, training and Police Reforms5. Policing in present scenario			
Unit – 02: POWERS, DUTIES AND CHALLENGES OF POLICE			14
Chapter-3: Powers and duties <ol style="list-style-type: none">6) Executive powers and duties of police officers in the investigation7) Police accountability in India: Courts, Executive Magistrates ,State Government, CAO, Citizens/ Community, Programmes for redressing Public grievances, Police Complaints Authorities Chapter-4: Challenges in policing <ol style="list-style-type: none">8) Internal and external challenges in policing9) Police Image, Police Corruption, Police and Human Rights10) Technological short comings and policing			
UNIT – 3 CRIMINAL INVESTIGATION			14
Chapter-5: Basics of Investigation <ol style="list-style-type: none">1. Objectives of Criminal Investigation1) Characteristics and role of Investigating officer			

Chapter-6: Legal procedures in Investigation <ol style="list-style-type: none"> 1. Investigation procedures in traditional, contemporary and special crimes 2. Case Laws on Registration of FIR, charge sheet, recording of statements, arrest, confession, summons and warrants. 	
Unit - 04: CRIME SCENE INVESTIGATION	14
Chapter -7 Fundamentals of Cyber Crime and Digital Policing <ol style="list-style-type: none"> 1. Introduction to cybercrime: definitions, classifications, global trends 2. Evolution and scope of Digital Policing and its categories(hacking, phishing, cyberbullying, identity theft, ransomware, dark web) 3. Digital policing vs. Traditional policing. Chapter - 08: Cyber Laws and Legal Framework <ul style="list-style-type: none"> • Indian IT Act 2000 and Amendments • Digital Personal Data Protection Act(DPDP ACT), 2023 • Admissibility of Digital Evidence in court 	

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1. Nabar, B.S. 2007, Forensic Science in Crime Investigation, 3rd Edition, Asia Law House, Hyderabad.
2. Sharma B.R, 2007, Forensic Science in Criminal Investigation and Trials Universal Law Pub. Co. Pvt. Ltd.
3. Douglas Cruise (2002) The Business of Private Investigations, Texas: Thomas Investigative Publications.
4. Ramanujam T, 1992, Prevention and Detection of Crime, Madras Book Agency
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9. Reith, M., Carr, C., & Gunsch, G. (2002). An Examination of Digital Forensic Models. International Journal of Digital Evidence.
10. Cyber Crime Investigation Manual – Published by CBI, India.
11. Shinder, D. L. (2011). Scene of the Cybercrime. Syngress.

JOURNAL REFERENCES

1. International journal of police science and management, SAGE
2. The Indian Police Journal
3. The Journal criminal Law, Criminology and Police Science, JSTOR ISSN-15476154
4. Digital Investigation (Elsevier)
5. Journal of Cybersecurity (Oxford Academic)
6. International Journal of Cyber Criminology
7. Computer Law & Security Review
8. Journal of Digital Forensics, Security and Law (JDFSL)

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1. https://www.researchgate.net/publication/318324772_POLICE_SCIENCE_SCIENCE_OF_THE_POLICE_OR_SCIENCE_FOR_THE_POLICE_-_CONCEPTUAL_CLARIFICATION_AND_TAXONOMY_FOR_COMPARING_POLICE_SYSTEMS
2. <https://www.ojp.gov/pdffiles1/nij/228922.pdf>
3. https://www.researchgate.net/publication/340874515_Police_science_as_an_emerging_scientific_discipline
4. <https://www.cert-in.org.in> – CERT-In, India
5. <https://www.interpol.int> – INTERPOL Cybercrime Directorate
6. <https://cybercrime.gov.in> – Indian Cybercrime Reporting Portal
7. <https://www.ncsc.gov.uk> – UK National Cyber Security Centre
8. <https://nciipc.gov.in> – National Critical Information Infrastructure Protection Centre

PEDAGOGY: Lecture, Assignments, Interactive Session, ICT and Group Discussion.

Formative Assessment 40 (Theory Tests, Activities/Assignment/Seminar and Attendance)	
Assessment Occasion/Type	Weightage in Marks
Theory Test (C1)	10
Activity/Seminar/Presentation Assignment/ Case Study/Field Work/Project Work (C2)	05+05=10
Total	20

SEMESTER - III

Content of Practical Course DSC-3P

Credits: 02. Marks; 10+40=50

10 Students per Batch

1. Procedure and process of filing complaint(Online & Offline) at the Police Station
2. Identification of Ranks and Badges of Police Officers
3. To Collect Forms of Various Summons and Warrants
4. To Identify Fake Notes and Counterfeit Coins
5. Reconstruction of Scene of Crime and report writing
6. Handling, packing and forwarding of physical clues to experts
 - i. Fingerprints on articles,
 - ii. Blood stains on articles,
 - iii. Hair and fiber samples,
 - iv. Bullet Cartridges,
 - v. Shoeprint & Footprint on floor and other surfaces

SEMESTER 3 ELECTIVE PAPERS
ELECTIVE (DSE) – (i) Inclusive Education
POLICE ORGANIZATION IN INDIA

- Understand the concept and purpose of Police Organization in India , the developmental process over the years according to the needs of the society.
- Develop the knowledge regarding the historical development of police system, organization, structure and functions of police.
- Explain the different Police Units at the Centre and at the State
- Become aware about the different Auxiliary Units and their functions.

Number of Theory Credits	Number of lecture hours/semester	Number of practical Credits	Number of practical hours/semester
2	30	-----	-----
Content of Theory Course 1			30 Hrs
Unit-I: Introduction to Police Organization			10
Chapter-1 Police Organization: Concept and Brief Historical Background Chapter-2 Central Police Organization and Institutes (National Cadet Corps- NCC, Narcotic Control Bureau-NCB, NIA, RAW, SPG, BPR&D, NCRB, NPA and NSG) Chapter-3 Relationship between Police and Local Government: Magistracy, Executive Magistrates and Other Departments (Forest, Excise, Prison, Health etc) Chapter-4 Police Administration: Enforcing law of the land, Maintaining Law and Order, other citizen services etc			
Unit-II: State Police Special Units			10
Chapter-5 State Crime Record Bureau, State Finger Print Bureau, State Forensic Science Laboratory and Intelligence Department/Special branch Chapter-6 Women Police Stations, Cybercrime Police Stations, DCRE, DCIB Chapter-7 Vigilance Units: KPTCL, KSRTC, BMTF, BDA, Revenue Task Force			
Unit-III: Auxiliary Units and Other Organizations			10
Chapter-8 Home guards, Special Police Officers, Students Police Cadets and Civil Defense Chapter-9 Karnataka State and District Legal Authority and their functions Chapter-10 State women commission, State SC/ST and Minority Commissions, State Human Rights Commissions			

References:

1. Banerjee,D, 2005, Central Police Organization, Part I & Part II, Allied Publishers. Pvt. Ltd.,
2. DovalAjit and Lal BR, 2010, Manas Police Security Year Book 2010-2011, Manas Publications.
3. Earle Howard H. 1970, Police Community relations, Charles C. Thomas Publisher.
4. Ghosh Gautam, 2007 Police Accountability at the Cutting Edge Level, APH Publishing Corporation.
5. Guharoy J T, 1999, Policing in the 21st Century Indian Institute of Public Administration.
6. Gupta, Anandswarup, 2007, Crime and Police in India, Sahitya Bhavan, Agra.
7. James, Vadckumchery, 1998, Crime, Police and Correction, APH Publishing C., New Delhi.
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10. Ramanjam,T, 1992, Prevention and Detection of Crime, Madras Book Agency.
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14. Singh SoibamIbocha, 2007 Community Policing, Akansha Publishing House, New Delhi
15. Srivastava Aparna, 1999, Role of Police in Changing Society, APH Publishing House.

Journals:

Indian Police Journal published by Bureau of Police Research and Development New Delhi.

Crime in India published by National Crime Record Bureau.MHAGovernment of India New Delhi

Digital References:

Pedagogy: Lecture, Assignments, Interactive Sessions, ICT, Group Discussion

Formative Assessment Marks10 (Written Tests/ Activities/Assignment/Seminar & Attendance)	
Assessment Occasion/type	Weightage in Marks
Written Test (2)	05
Activity/ Seminar/Assignment	03
Attendance	02
Total	10

Date

Course Co-ordinator

Subject Committee Chairperson

SEMESTER 3 ELECTIVE PAPERS

ELECTIVE (DSE) – (ii) Inclusive Education

SOCIAL PROBLEMS AND CRIME

COURSE OUTCOMES

- Understand the different social problems in India, their causes, which leads to crimes, criminality and social disorder.
- Explain the various forms of women and child related issues, crimes and their related laws.
- Understand about alcoholism and drugs leads to social disorganization and crimes
- Explain about the corruption and terrorism and their impact on society with related laws.

Number of Theory Credits	Number of lecture hours/semester	Number of practical Credits	Number of practical hours/semester
2	30	-----	-----
Content of Theory Course1			30Hrs
Unit-I:Introduction to Social Problems			10
Chapter-1 Social problem and crime: concept, types and stages in the development of social problems. Chapter-2Theoretical approaches to social problems, social disorganisation, cultural lag, value conflict and personal deviation Chapter-3 Causes of social problems leading to crime			
Unit-II: Women and Child Related Social Problems and Crimes			10
Chapter-4Child abuse and child labour: Meaning, Causes and effects of child Abuse Chapter-5Special acts - Prohibition of Child Marriage Act 2006 , Child labour (Prohibition & Regulation) Act 1986, Immoral Traffic (Prevention) Act 1956 and Protection of Children from Sexual Offences Act, 2012 Chapter-6Women Related Issues, Crimes and Laws: Prostitution, Domestic Violence, Dowry Harassment, Sexual Harassment of Women at Workplace, Indecent representation of women etcand related laws, Sati System and Honour killing.			
Unit-III: Other Social Problems			10
Chapter-7Alcoholism:Meaning, definitions of alcoholismCauses, consequences and societal costs of alcoholism. Chapter-8Drug Addiction:Nature and impact of drug addiction – role of family and peer group, Narcotic Drugs and Psychotropic Substance Act. 1985 Chapter-9Untouchability,Corruption and Terrorism: Meaning, Types, Causes and related Laws			

Books References:

1. Ram, Ahuja, 1992. Social Problems in India, Rawat Publications, New Delhi.
2. Turner, Jonathan H., 1987; The Structure of Sociological Theory, Fourth Edition, Rawat Publications, Jaipur.
3. Henry, Kenneth, 1978, Social Problems: Institutional and Interpersonal Perspectives, Scott, Fopresman and Company, Illinois, London.
4. Kothari, Rajani, 1988, Transformation and Survival, Ajanta Publications, Delhi.
5. Lerner, Daniel, 1964, The Passing of Traditional Society, The Free Press, London.
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10. Uberoi, Patricia. Ed. 1993. Family, Kinship and Marriage in India. Delhi, Oxford University Press.
11. Uberoi, Patricia. 2006. Freedom and Destiny: Gender, Family, and Popular Culture in India. Delhi: Oxford University Press.

Journals:

European Journal on Criminal Policy and Research, Springer

The International Journal for Crime, Justice and Social Democracy ISSN 2202-8005

Digital Reference:

1. <https://www.taylorfrancis.com/books/mono/10.4324/9780203791578/framing-victim-nancy-berns>
2. <https://psycnet.apa.org/record/1973-31083-001>
3. <https://academic.oup.com/socpro/article/18/3/298/1691981?login=true>
4. <https://www.jstor.org/stable/798932>
5. <https://academic.oup.com/socpro/article-abstract/16/4/409/2925015>

Pedagogy: Lecture, Assignments, Interactive Sessions, ICT, Group Discussion

Formative Assessment Marks 10 (Written Tests/ Activities/Assignment/Seminar & Attendance)	
Assessment Occasion/type	Weightage in Marks
Written Test (2)	05
Activity/ Seminar/Assignment	03
Attendance	02
Total	10

Date

Course Coordinator

Subject Committee Chairperson

SEMESTER - IV

B.A/B.Sc. CRIMINOLOGY and FORENSIC SCIENCE

Title of the Course: Forensic Psychology & Criminal Profiling - DSC-2T

Course Title: FUNDAMENTALS OF FORENSIC SCIENCE. DSC-2T	
Total Contact Hours: 56	Course Credits: 03
Formative Assessment Marks: 20	Duration of ESA/Exam Hrs: 03
Model Syllabus Authors: BOS	Summative Assessment Marks: 80

Course Pre-requisite(s): Mention only course titles from the curriculum that are needed to be taken by the students before registering for this course.

COURSE OUTCOMES

At the end of the course the student should be able to:

1. Understand about the overview of forensic psychology and its applications along with legal aspects of forensic psychology.
2. Explain the significance of criminal profiling and the importance of psychological assessment in gauging criminal behavior.
3. Describing the tools and techniques required for detection of deception.
4. Understanding the critical assessment of advanced forensic techniques like polygraphy, narco analysis and brain electrical oscillation signatures.

SEMESTER - IV

B.A/B.Sc. CRIMINOLOGY and FORENSIC SCIENCE

Title of the Course: FORENSIC PSYCHOLOGY & CRIMINAL PROFILING - DSC-2T

Number of Theory Credits	Number of Lecture Hours/Semester	Number of Practical Credits	Number of Practical Hours/Semester
03	56	02	56
CONTENT OF THEORY PAPER			56 Hrs
Unit – 1 INTRODUCTION TO FORENSIC PSYCHOLOGY			14
Chapter-1 Definition and fundamental concepts of forensic psychology and forensic Psychiatry. 1. Psychology and law. 2. Ethical issues in forensic psychology 3. Assessment of mental competency. 4. Mental disorders and forensic psychology.			
Chapter-2 Psychology of evidence 1. Eyewitness testimony, 2. Confession evidence. 3. Criminal profiling. 4. Psychology in the courtroom, with special reference to Section 22 of BNS.			
Unit – 2 PSYCHOLOGY AND CRIMINAL BEHAVIOR			14
Chapter-3 Psychopathology and personality disorder. 1. Psychological assessment and its importance. 2. Serial murderers. 3. Psychology of terrorism.			
Chapter-4 Biological factors and crime 1. Social learning theories, 2. Psycho-social factors, • Abuse.			
Chapter-5 Juvenile delinquency and Child Abuse 1. Theories of offending (social cognition, moral reasoning) 2. Child abuse (physical, sexual, emotional), Juvenile sex offenders, 3. Legal controversies.			
Unit - 3: INTRODUCTION TO PERSONALITY DISORDER			14
Chapter - 06: Personality: 1. Meaning and its importance in life. 2. Personality Development 3. Personality disorders 4. Types and its impact on life.			
Chapter-07: Therapy interfering behaviours 1) Various types of therapies to correct the behaviour 2) Cognitive Behaviour Therapy (CBT) to Family-focused therapy			

Unit -4: Detection of Deception	14
<p>Chapter - 08: Tools for detection of deception – •</p> <ol style="list-style-type: none"> 1) Interviews, 2) Non-verbal detection, 3) Statement analysis, • Voice stress analyzer, • Hypnosis. <p>Chapter-09: Polygraphy Test</p> <ol style="list-style-type: none"> 1) Operational and question formulation techniques, ethical and legal aspects, the guilty knowledge test. 2) Narco analysis and brain electrical oscillation signatures – principle and theory, ethical and legal issues. 3) Role of forensic psychologist in metal related cases and legal framework. 	

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1. A.A. Moenssens, J. Starrs, C.E. Henderson and F.E. Inbau, Scientific Evidence in Civil and Criminal Cases, 4th Edition, The Foundation Press, Inc., New York (1995).
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11. Karmen, A. (2016). Crime Victims: An Introduction to Victimology. Cengage Learning.
12. Ressler, R. K., Burgess, A. W., & Douglas, J. E. (1995). Sexual Homicide: Patterns and Motives. Free Press.

Journals:

1. Journal of Forensic Psychology Practice
2. International Journal of Offender Therapy and Comparative Criminology
3. Aggression and Violent Behavior.
4. Journal of Interpersonal Violence (*SAGE*)

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1. <https://www.infobooks.org/free-pdf-books/psychology/criminal-psychology/>
2. <https://www.apa.org> – American Psychological Association
3. <https://www.ncbi.nlm.nih.gov/pmc/> – National Center for Biotechnology Information (for psychology & trauma)
4. <https://www.nimh.nih.gov> – National Institute of Mental Health
5. <https://www.unodc.org> – United Nations Office on Drugs and Crime (Victim & Offender Studies)
6. <https://nij.ojp.gov> – National Institute of Justice (US)

PEDAGOGY: Lecture, Assignments, Interactive Session, ICT and Group Discussion.

Formative Assessment 40 (Theory Tests, Activities/Assignment/Seminar and Attendance)	
Assessment Occasion/Type	Weightage in Marks
Theory Test	10
Activity/Seminar/Presentation Assignment/Case Study/Field Work/Project Work (C2)	05+05=10
Total	20

SEMESTER - IV

Content of Practical Course DSC-4P

Credits: 02. Marks; 10+40=50

10 Students per Batch

List of Experiments to be conducted.

1. To cite a crime case where legal procedures pertaining to psychic behavior had to be invoked.
2. To prepare a report on relationship between mental disorders and forensic psychology.
3. To review a crime case involving serial murders.
4. Comment on the psychological traits of the accused.
5. To cite a criminal case in which narco-analysis was used as a means to detect deception.
6. To cite a criminal case in which polygraph test was used as a means to detect deception.
7. To cite a crime case involving a juvenile and argue for and against lowering the age for categorizing an individual as juvenile.

SEMESTER IV - ELECTIVE PAPERS

ELECTIVE (DSE) – (i) Inclusive Education

ELEMENTS OF FORENSIC SCIENCE

- Understand the definition, nature, scope, role of forensic science and historical background of forensic science
- Explain the basic elements, different branches and principles of forensic science.
- Describe the scope and importance of Central and State Forensic Science Laboratories
- Explain the role of National Crime Record Bureau , BPRD and DTI

Number of Theory Credits	Number of lecture hours/semester	Number of practical Credits	Number of practical hours/semester
2	30	-----	-----
Content of Theory Course 1			30 Hrs
Unit-I: Fundamental Concepts of Forensic Science			10
Chapter-1 Definitions, Nature, Scope and role of forensic science.			
Chapter-2 Historical development and contribution of pioneers			
Chapter-3 Principles of forensic science			
Unit-II: Branches of Forensic Science			10
Chapter-4 Branches of Forensic Science			
Chapter-5 Traditional and Contemporary			
Chapter-6 Frye Case and Daubert Standards.			
Unit-III: Forensic Science Laboratories and Training institutes			10
Chapter-7 Hierarchical set up of Central Forensic Science Laboratories, State Forensic Science Laboratories and Directorate of Forensic Science.			
Chapter-8 Government Examiners of Questioned Documents and Fingerprint Bureaus.			
Chapter-9 National Crime Records Bureau, Police & Detective Training Institutes,			
Chapter-10 Bureau of Police Research & Development,			

References:

1. B.B. Nanda and R.K. Tiwari, *Forensic Science in India: A Vision for the Twenty First Century*, Select Publishers, New Delhi (2001).
2. M.K. Bhasin and S. Nath, *Role of Forensic Science in the New Millennium*, University of Delhi, Delhi (2002).
3. S.H. James and J.J. Nordby, *Forensic Science: An Introduction to Scientific and Investigative Techniques*, 2nd Edition, CRC Press, Boca Raton (2005).
4. Theju Kumar C, Vaishnanvi V Sawant, Swapna Gowri, (2024). *Introduction to Criminology & Forensic Science*, Current Publication
5. W.G. Eckert and R.K. Wright in *Introduction to Forensic Sciences*, 2nd Edition, W.G. Eckert (ED.), CRC Press, Boca Raton (1997).
6. R. Saferstein, *Criminalistics*, 8th Edition, Prentice Hall, New Jersey (2004).

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Digital References:

Pedagogy: Lecture, Assignments, Interactive Sessions, ICT, Group Discussion

Formative Assessment Marks10 (Written Tests/ Activities/Assignment/Seminar & Attendance)	
Assessment Occasion/type	Weightage in Marks
Written Test (2)	05
Activity/ Seminar/Assignment	03
Attendance	02
Total	10

Date

Course Coordinator

Subject Committee Chairperson

SEMESTER IV - ELECTIVE PAPERS

ELECTIVE (DSE) – (ii) Inclusive Education

DIGITAL SKILL FOR CRIME DATA ANALYSIS

Course Outcome:

- Understand the importance of specific digital skills required for crime data analysis
- Encourage to develop the necessary digital skills to become crime data analyst
- Explain the importance of communication, analytical skills and writing skills
- Explain the pre-requisite qualities of aabled crime data analysts.

Number of Theory Credits	Number of lecture hours/semester	Number of practical Credits	Number of practical hours/semester
2	30	-----	-----
Content of Theory Course1			30 Hrs
Unit-I: Introduction to Computer and networking			10
Chapter-1 Fundamentals of Computers and operating system <ul style="list-style-type: none">• Computers & Networking – Basics of computers, its Definitions and classification• Operating systems- Operating system and Function, Batch, Interactive, Time-sharing and Real-Time systems, CPU Scheduling – Scheduling concept, algorithms and Performance criteria, memory management. File sharing, File System Implementation. Overview of Linux Operating System. Chapter-2 Basics of Networking <ul style="list-style-type: none">• Network Components - Server, client, routers, Shared Printers and other peripherals, Network Interface Card.• Network Devices – hubs, Switches, routers, repeaters. OSI model and TCP/IP model. Basic HTTP, World Wide Web, Web Browsers, Web Servers, Domain Names, URL and DNS.• IP addressing – types and classes. Types of Networks – LAN, MAN and WAN. Working of Wi-Fi and Bluetooth. Overview of cloud computing.			
Unit-II: Cyber-crime, cyber security& Cyber Forensics			10

<p>Chapter-3 Cyber Crime</p> <ul style="list-style-type: none"> • Cyber crime- meaning, definition and its classification • Cybercrimes against Individuals – E-mail spoofing and online frauds, Phishing and its forms, Spamming, Cyber-defamation, Cyber stalking, Cyber Bullying and harassment, Computer Sabotage, Pornography, Password Sniffing. etc • Cyber Crimes against Women and Children. • Cybercrime against organization – Unauthorized access of computer, Password Sniffing, Denial-of-service (DOS) attack, Backdoors and Malwares and its types, E-mail Bombing, Salami Attack, Software Piracy, Industrial Espionage, Intruder attacks. <p>Chapter-4 Cyber Security</p> <ul style="list-style-type: none"> • Risk evaluation – Identification of Threats, Vulnerabilities and Risk. • Risk Management, Risk Assessment and Analysis. • Information Classification, Policies, Standards, Procedure and Guidelines. • Security Frameworks, Layers of Security. • Authorization and Access Controls- Models, Methods and Types of Access Control. <p>Chapter-5 Digital Forensics: Meaning, Importance and Tools</p> <ul style="list-style-type: none"> • Types of Computer Forensics Tools and its needs • Computer Forensics Software Tools. • UNIX/Linux Forensics Tools, Other GUI Forensics Tools, Computer Forensics Hardware Tools, Forensic Workstations 	
Unit –III IT Act and other Laws for Cyber-crime	10
<p>Chapter-6 IT Act 2000 :</p> <ul style="list-style-type: none"> • Objectives, Applicability, Non-applicability, Definitions, Amendments and Limitations. • Various cyber-crimes under Sections 43 (a) to (j), 43A, 65, 66, 66A to 66F, 67, 67A, 67B, 70, 70A, 70B, 80 etc. along with respective penalties, punishment and fines, Penal Provisions. <p>Chapter-7 Indian Evidence Act :</p> <ul style="list-style-type: none"> • Classification – civil, criminal cases. Essential elements of criminal law • Cross examination and re-examination of witnesses. • Sections 32, 45, 46, 47, 57, 58, 60, 73, 135, 136, 137, 138, 141. Section 293 in the code of criminal procedure. Secondary Evidence Section 65-B. 	

References:

1. Fox, J.A. (1978). *Forecasting crime data*. Lexington, MA: Lexington Books.
2. Deborah Osborne, Susan Wernicke (2003)*Introduction to Crime Analysis*
3. *Basic Resources for Criminal Justice Practice*. Routledge
4. David Elio Malocco (2014)*Forensic Science: Crime Scene Analysis*. Createspace
5. Independent Publisher

Digital References:

Police Crime Analysis Unit Handbook

<https://www.ojp.gov/pdffiles1/Digitization/143486NCJRS.pdf>

<https://www.thebalancecareers.com/crime-analyst-career-profile-974846>

<https://www.futurelearn.com/>

Pedagogy: Lecture, Assignments, Interactive Sessions, ICT, Group Discussion

Formative Assessment Marks10 (Written Tests/ Activities/Assignment/Seminar & Attendance)	
Assessment Occasion/type	Weightage in Marks
Written Test (2)	05
Activity/ Seminar/Assignment	03
Attendance	02
Total	10

Date

Course Coordinator

Subject Committee Chairperson

SEMESTER - V

B.A/B.Sc. CRIMINOLOGY and FORENSIC SCIENCE

Title of the Course: CRIMINAL JUSTICE RESPONSES:

CORRECTIONS, JUVENILES, VICTIMS AND RIGHTS - DSC-5T

Number of Theory Credits	Number of Lecture Hours/Semester	Number of Practical Credits	Number of Practical Hours/Semester
03	56	02	56
CONTENT OF THEORY PAPER			56 Hrs
Unit – 1 CORRECTIONAL ADMINISTRATION			14
Chapter-1 Evolution and Concept of Correctional System. <ul style="list-style-type: none"> 1. History and philosophy of punishment 2. Shift from punishment to correction 3. Role of correctional institutions in criminal justice Chapter-2 Prison Administration and Reforms <ul style="list-style-type: none"> 1. Structure of prison administration in India 2. Roles of prison officials 3. National and international prison reforms 4. Rights of prisoners – constitutional and legal provisions 			
Unit – 2 JUVENILE JUSTICE AND CHILD PROTECTION			14
Chapter-3 Juvenile Justice System in India. <ul style="list-style-type: none"> 1. Historical development of juvenile justice 2. Juvenile Justice (Care and Protection of Children) Act, 2015 3. Categories: Children in conflict with law, Children in need of care and protection 4. Institutions under JJ Act: JJB, CWC, Special Homes, Observation Homes Chapter-4 Rehabilitation and Social Reintegration of Juveniles <ul style="list-style-type: none"> 1. Non-institutional services: Probation, foster care, sponsorship 2. Role of NGOs and civil society 3. Aftercare programmes and their effectiveness 			
Unit - 3: VICTIMOLOGY			14
Chapter - 05: Introduction to Victimology <ul style="list-style-type: none"> 1. Definition and Scope of Victimology 2. Historical Development of Victim Studies 3. Types of Victims (Primary, Secondary, Tertiary) 4. Victims and Criminal Justice System(CJS) Chapter-06: Victim Rights and Support Systems			

<ol style="list-style-type: none"> 1. Victim's Rights under Indian and International Law 2. Role of Police, Judiciary, NGOs and Support Agencies in victim support 3. Victim Compensation Schemes (NLSA, State Schemes) and restorative justice 	
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Unit -4: HUMAN RIGHTS AND CRIMINAL JUSTICE SYSTEM	14
<p>Chapter - 07: Human Rights: Concept and Development</p> <ol style="list-style-type: none"> 1. Definition, evolution, and sources of human rights 2. Universal Declaration of Human Rights (UDHR) 3. Human rights and Indian Constitution <p>Chapter-09: Human Rights and Criminal Justice Agencies</p> <ol style="list-style-type: none"> 1. Human rights of the accused, under-trials, and convicts 2. Role of National and State Human Rights Commissions 3. Custodial violence and legal safeguards <p>Chapter -10: Case Studies and Best Practices</p> <ol style="list-style-type: none"> 1. Nirbhaya case and victim support response 2. Juvenile in Delhi gang rape case 3. Landmark judgments in prison reforms and human rights 4. International practices: Norway, USA, Japan in correctional and juvenile reforms 	

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1. Gaur, K. D. (2015). *Criminal law and human rights*. Universal Law Publishing.
2. Iyer, V. R. K. (2004). *Prisoners and human rights*. Eastern Book Company.
3. Kumari, V. (2010). *The juvenile justice system in India: From welfare to rights*. Oxford University Press.
4. Rajan, V. N. (1981). *Victimology in India: An introductory text*. Allied Publishers.
5. Srivastava, S. P. (2003). *Juvenile justice in India: Retrospect and prospect*. Gyan Publishing House.
6. Sharma, R. N. (2009). *Human rights in India: Historical, social and political perspectives*. Mittal Publications.

7. Sarkar, S. (2014). *Correctional administration in India: Emerging issues and challenges*. Regal Publications.
8. UNODC. (2006). *Handbook on Restorative Justice Programmes*. United Nations Office on Drugs and Crime.
https://www.unodc.org/pdf/criminal_justice/06-56290_Ebook.pdf
9. National Human Rights Commission. (2002). *Custodial justice*. NHRC Publications.
10. Ministry of Women and Child Development. (2015). *Juvenile Justice (Care and Protection of Children) Act, 2015 with Model Rules*. Government of India.

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International Journals

1. International Journal of Offender Therapy and Comparative Criminology – SAGE
<https://journals.sagepub.com/home/ijo>
2. The Prison Journal – SAGE
<https://journals.sagepub.com/home/prj>
3. Youth Justice: An International Journal – SAGE
<https://journals.sagepub.com/home/yjj>
4. International Review of Victimology – SAGE
<https://journals.sagepub.com/home/irv>
5. Journal of Human Rights Practice – Oxford University Press
<https://academic.oup.com/jhrp>
6. Human Rights Quarterly – Johns Hopkins University Press
<https://muse.jhu.edu/journal/34>

Indian Journals

7. Indian Journal of Criminology – Indian Society of Criminology
<http://www.iscjournal.in>
8. Indian Journal of Human Rights and the Law – SAGE India
<https://journals.sagepub.com/home/hrl>

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1. **National Human Rights Commission (NHRC), India**
<https://nhrc.nic.in>
2. **Ministry of Women and Child Development (MWCD), Government of India**
<https://wcd.nic.in>
3. **National Commission for Protection of Child Rights (NCPCR)**
<https://ncpcr.gov.in>
4. **United Nations Office on Drugs and Crime (UNODC)**
<https://www.unodc.org>

5. **United Nations Human Rights Office (OHCHR)**
<https://www.ohchr.org>
6. **UNICEF India – Child Rights and Protection**
<https://www.unicef.org/india>
7. **National Crime Records Bureau (NCRB) – Crime and Prison Statistics**
<https://ncrb.gov.in>
8. **Bureau of Police Research and Development (BPRD)**
<https://bprd.nic.in>
9. **Amnesty International India**
<https://www.amnesty.org/en/location/asia-and-the-pacific/south-asia/india/>
10. **Penal Reform International (PRI)**
<https://www.penalreform.org>

PEDAGOGY: Lecture, Assignments, Interactive Session, ICT and Group Discussion.

Formative Assessment 40 (Theory Tests, Activities/Assignment/Seminar and Attendance)	
Assessment Occasion/Type	Weightage in Marks
Theory Test	10
Activity/Seminar/Presentation Assignment/Case Study/Field Work/Project Work (C2)	05+05=10
Total	20

SEMESTER - V

B.A/B.Sc. CRIMINOLOGY and FORENSIC SCIENCE

Title of the Course: MEDICAL JURISPRUDENCE AND TOXICOLOGY - DSC-6T

Number of Theory Credits	Number of Lecture Hours/Semester	Number of Practical Credits	Number of Practical Hours/Semester
03	56	02	56
CONTENT OF THEORY PAPER			56 Hrs
Unit – 1 MEDICAL JURISPRUDENCE AND TOXICOLOGY			14
Chapter- I Introduction to JURISPRUDENCE <ol style="list-style-type: none"> 1. Meaning and definition 2. Legal And Ethical Aspects Of Practice Of Medicine 3. The Indian Medical Council and State Medical Council: Formation, Functions 4. Rights, Privileges and Duties of Registered Medical Practitioners. 5. Infamous conduct, Professional secrecy and privileged communications, Medical Ethics and prohibition of Torture & care of Torture Victims 6. Consent – Its relevance in Medical Practice & medical record maintenance. 			
Chapter- II MEDICAL JURISPRUDENCE <ol style="list-style-type: none"> 1. Medical Negligence and contributory negligence, Precautionary measures and defenses for Medical Practitioners against legal actions, Medical/Doctors indemnity insurance, Consumer Protection Act relevant to medical practice. 2. Euthanasia – Current views and dilemmas, Different codes of Medical Ethics and Ethics in Research. 			
Unit – 2 INTRODUCTION TO FORENSIC MEDICINE			14
Chapter- 3 Meaning of forensic medicine: <ol style="list-style-type: none"> 1. Definition, Scope Relevant forensic medicine 2. History of Forensic Medicine 3. Need, Scope, Importance and probative value of medical evidence in Crime Investigation 			
Chapter- 4 Thanatology: <ol style="list-style-type: none"> 1. Thanatology, death, its causes, stages of death, signs of death and changes following death, Asphyxia and accidents, 2. Death due to heat, cold and electrocution 3. Injuries classification and medico legal aspects 4. Sexual offences 5. Forensic psychiatry 			
Unit - 3: FORENSIC TOXICOLOGY			14

<p>Chapter - 05: Introduction to Toxicology</p> <ol style="list-style-type: none"> 1. Introduction to Toxicology 2. Epidemiology of poisoning 3. General consideration and Laws in relation to poisons / Narcotic drugs and Psychotropic substances Act, 4. Duties and Responsibilities of attending Physician. 5. Basics of Environmental and Industrial Toxicology in relation to Health & Ecology; 6. Common poisons and their classification, Identification of common poisons, 7. Analytical Toxicology (Principles: Bedside & Common Lab. Tests), Collection, Preservation and Dispatch of Viscera to FSL 8. Regulatory Toxicology for prevention of Hazards to Health and Ecology. 	
<p>Chapter-06: Corrosive & Irritant Poisons:</p> <ol style="list-style-type: none"> 1. Inorganic Corrosives- Sulphuric, Nitric & Hydrochloric Acid 2. Organic Corrosives- Phenol, Oxalic Acid 3. Inorganic Non-Metallic Irritants- Phosphorus, Halogens, Inorganic Metallic Irritants- Arsenic, Lead, Mercury, Copper 4. Organic Vegetable Irritants- Abrus, Castor, Croton, Calotropis, Semicarpus, Ergot. 5. Organic Animal Irritants – Snake Bite, Scorpion & other common insect bites diagnosis and Management; Medicolegal Aspects 6. Mechanical Irritants- diagnosis and treatment & Medicolegal Aspects 	
<p>Unit -4: MAJOR POISONS</p>	<p>14</p>
<p>Chapter - 07: Neurotoxic</p> <ol style="list-style-type: none"> 1. Inebriates- Ethyl Alcohol, Methyl Alcohol 2. Somniferous and Sedative Hypnotics – Opium and Derivatives, Barbiturates Deliriant- Dhatura, Cannabis, Cocaine. 3. Insecticides/ Pesticides/ Agrochemical- Organo-phosphorus Compounds. Organo- chlorides, Carbamates Pyrethroids, Aluminium phosphide. 4. Spinal Poisons- Strychnine 5. Peripheral Poisons- Curare 	
<p>Chapter-08: Asphyxiants and Other Poisons</p> <ol style="list-style-type: none"> 1. ASPHYXIANTS (GASES)- Carbon monoxide, Carbon Dioxide Cyanogens and Cyanides 2. CARDIAC POISONS- Oleanders, Aconite, Tobacco <p>OTHER POISONS: Domestic/ Household Poisons- Kerosene, Detergents Disinfectants, Cosmetics, Rodenticide mothballs etc. . Therapeutic Drug Toxicity/ poisoning by Medicines- Salicylates, Paracetamol, Newer derivatives of sedatives Food Poisoning- Bacterial, Viral, Mushrooms, Chemical etc. iv. Drugs of dependence and Drug Abuse.</p>	

REFERENCES:

1	Andrew R.W.Jackson, Julie M Jackson, 2011, “Forensic Science”, Pearson Education Limited.
2	B.S.Nabar , 2001, forensic science in Crime Investigation”, Asia law House.
3	J C Upshaw Downs, Anjali Ranadive, Swienton , 2002, “Ethics in Forensic Science, Academic Press Publications.
4	Jay A Siegel, KatheyMirakovits, 2013, “Forensic Science: The Basics”, CRC press.
5	Jim Fraser, Robin Williams, 2013,”Hand book of Forensic Science”, Routldge publications.
6	Theju Kumar C, Vaishnanvi V Sawant, Swapna Gowri, (2024). <i>Introduction to Criminology & Forensic Science</i> , Current Publication.
7	Andrew R.W.Jackson, Julie M Jackson, 2011, “Forensic Science”, Pearson Education Limited.
8	B.S.Nabar , 2001, forensic science in Crime Investigation”, Asia law House.
9	J C Upshaw Downs, Anjali Ranadive, Swienton, 2002, “Ethics in Forensic Science, Academic Press Publications.
10.	Jay A Siegel, KatheyMirakovits, 2013, “Forensic Science: The Basics”, CRC press.

DIGITAL REFERENCE

- <https://study.com/academy/lesson/physical-evidence-definition-types-law.html>
- <https://www.forensicpage.com/>
- <https://www.legalserviceindia.com/legal/article-8572-types-and-significance-of-physical-evidence.html>
- <http://www.forensic-evidence.com/>
- <http://www.ncjrs.gov/App/AbstractDB/AbstractDBSearch.aspx>

PEDAGOGY: Lecture, Assignments, Interactive Session, ICT and Group Discussion.

Formative Assessment 40 (Theory Tests, Activities/Assignment/Seminar and Attendance)	
Assessment Occasion/Type	Weightage in Marks
Theory Test	10
Activity/Seminar/Presentation Assignment/Case Study/Field Work/Project Work (C2)	05+05=10
Total	20

MEDICO-LEGAL EXAMINATION (PRACTICAL)

Course Title	Medico-legal Examination (Practical)		Practical Credits	2
Course Code	DSC-5P		Contact Hours	56 Hrs
Summative Assessment	40 Marks	Formative Assessment	10 Marks	
Practical Content				
Unit-1 Introduction to Medico-legal Examination (30 Hrs)				
1. Medico-legal Aspects of Homicidal, Suicidal and Accidental.				
2. Examination of human skeleton.				
3. Identification of Sex and Age through Bone remains.				
4. Examination of different wounds and Injuries.				
Unit-II Examination of Hair and Fiber (26 Hrs)				
5. Examination of hair				
6. Morphology of hair				
7. Examination and Comparison of Natural and Synthetic fibers				

Pedagogy: Conduct experiments, applying forensic techniques

Formative Assessment for Practical	
Assessment Occasion/type	Marks
Record	10
Plan, Procedure & Conduction	10
Results & Discussion	05
Applying Forensic Techniques	05
Viva	10
Total	40 Marks

References	
1	Andrew R.W.Jackson, Julie M Jackson, 2011, “Forensic Science”, Pearson Education Limited.
2	B.S.Nabar , 2001, forensic science in Crime Investigation”, Asia law House.
3	J C Upshaw Downs, Anjali Ranadive, Swienton , 2002, “Ethics in Forensic Science, Academic Press Publications.

SEMESTER - V

B.A/B.Sc. CRIMINOLOGY and FORENSIC SCIENCE

Title of the Course: DIGITAL FORENSICS AND CYBERCRIME - DSC-7T

Number of Theory Credits	Number of Lecture Hours/Semester	Number of Practical Credits	Number of Practical Hours/Semester
03	56	02	56
CONTENT OF THEORY PAPER			56 Hrs
Unit – 1 INTRODUCTION TO DIGITAL FORENSICS			14
Chapter- 1 Basics of Computer: <ol style="list-style-type: none"> 1. Basic Computer Knowledge, types of computers, components of computer, input and output devices, operating system types. 2. Computer memory - Volatile and Non-Volatile memory, types of storage media – Hard Drive, SSD, Optical Devices. 			
Chapter- 2 Basics of Digital Forensics <ol style="list-style-type: none"> 1. Introduction and Principles of Digital Forensics, Good Forensic Practices, Daubert's Standards. 2. Collection of Evidence - Single System, Networked System and Remote System Search and Seizure of Volatile and Non-volatile Digital Evidence, Imaging and Hashing of Digital Evidences. 3. Introduction to Deleted File Recovery, Steganography and Steganalysis, Data Recovery Tools and Procedures. 4. Importance of Log Analysis in forensic analysis. 5. Validating Forensic Data, Addressing Data-Hiding Techniques, Performing Remote Acquisition, data carving. 			
Chapter 3: Network and Mobile Forensics <ol style="list-style-type: none"> 1. Monitoring of computer network and activities, Live Packet Capturing and Analysis. Network Intrusion, Detection and Analysis. 2. Network Devices – hubs, Switches, routers, repeaters. Basic HTTP World Wide Web, Web Browsers, Web Servers, Domain Names, URI and DNS. IP addressing – types and classes. Types of Networks – LAN, MAN and WAN. 3. Investigating network attacks. Evidence collection from Routers & CCTV DVRs. 4. Mobile volatile memory analysis, memory image analysis, recovering cached and internet artifacts, internet browsing artifacts, runtime disk explorer, memory dump analyser, crash dump analyser, cryptoanalysis. 5. Types of Evidence present in mobile phones - Files present in SIM card, phone memory dump, and evidences in memory card. 6. Seizure and Preservation of mobile phones and PDA. Mobile phone evidence extraction process. 			

<ul style="list-style-type: none"> 7. Tracking of mobile phone location. Analysis of mobile data like SMS, call logs contacts, media files, recordings and important mobile application data. 8. CDR and IPDR analysis. 	
Unit – 2 INTRODUCTION TO CYBERCRIMES	14
Chapter- 4 Defining Cyberspace and Cybercrimes <ul style="list-style-type: none"> 6. Cyberspace: - Concept of Cyberspace, Emergence of Cyberspace, Nature & Meaning of Cyberspace, Attributes of Cyberspace. 7. Definition and Origin; Distinction between Cyber Crime and Conventional Crime 8. Information Technology - its meaning and importance in the daily life of people in modern societies. Chapter- 5 Types of Cybercrimes : <ul style="list-style-type: none"> 1. Crimes targeting Computers: Unauthorized Access, Packet Sniffing, Malicious Code including Trojans, Viruses, Logic Bombs, Password Sniffing, Denial-of-service (DOS attack, Backdoors and Malwares and its types, E-mail Bombing, Salami Attack Software Piracy, Industrial Espionage, Intruder attacks. 2. Cybercrimes against Individuals – E-mail spoofing and online frauds Phishing and its forms, Spamming, Cyber-defamation, Cyberstalking Cyber Bullying and harassment, Computer Sabotage, Pornographic offenses, Key loggers and Screen loggers, Digital arrest and Cyber homicide. 3. Phases of cyber-attack – Reconnaissance, Passive Attacks, Active Attacks, Scanning, Gaining Access, Maintaining Access, Lateral movement and Covering Tracks. 4. Different types of tools used in cybercrime. 	
Unit - 3: CYBER RELATED LAWS AND ENFORCEMENT AGENCIES	14
Chapter - 06: Regulatory Framework of Information and Technology Act <ul style="list-style-type: none"> 1. Information Technology Act 2000 and Information Technology (Amendment) Ac 2008 - Objectives, Applicability, Non-applicability, Definitions, Amendments and Limitations. 2. Offences Under IT Act, Offences Related with Digital Signature and Electronic Signature Under IT Act. Various cyber-crimes under Sections 43 (a) to (j), 43A, 65, 66, 66A to 66F, 67, 67A, 67B, 70, 70A, 70B, 80 etc Penalties Under IT Act, 3. Regulation of Certifying Authorities, Appointment and Powers and Functions of Controller, Cyber Appellate Tribunal Chapter-07: Investigation of Cyber Crimes <ul style="list-style-type: none"> 1. Investigation of malicious applications Agencies for investigation in India, their powers and their constitution as per Indian Laws Procedures. 2. Procedure for Search and seizure of digital evidences in cyber-crime incident Forensics Investigation Process - Pre-search consideration, Acquisition, Duplication & Preservation of evidences, Examination and Analysis of evidences, Storing o Evidences, Documentation and 	

<p>Reporting, Maintaining the Chain of Custody.</p> <ol style="list-style-type: none"> 3. Data Acquisition of live system, Shutdown Systems and Remote systems, servers. E mail Investigations, Password Cracking. 4. Seizing and preserving mobile devices. Methods of data acquisition of evidence from mobile devices. Data Acquisition and Evidence Gathering from social media Performing Data Acquisition of encrypted systems. 5. Challenges and issues in Cybercrime investigation. 6. Intellectual Property Rights in the Cyber World. 	
Unit -4: CYBER SECURITY	14
<p>Chapter - 08: Introduction to Cyber Security</p> <ol style="list-style-type: none"> 1. Evolution and Impact of Internet, Internet Services, Concept of World Wide Web, History of World Wide Web, Purpose of Web, Functioning & Mechanism of Web. 2. Introduction to Cyber Security. Confidentiality, Integrity and Availability – Triad. 3. Attacks: Threats, Vulnerabilities and Risk. Risk Management, Risk Assessment and Analysis. Information Classification, Policies, Standards, Procedure and Guidelines. 4. Controls: Physical, Logical and Administrative; Security Frameworks, Defence in- depth: Layers of Security. 5. Identification and Authentication Factors. Authorization and Access Controls- Models, Methods and Types of Access Control. <p>Chapter-09: Network Architecture & Security</p> <ol style="list-style-type: none"> 1. Network Scanning, Eaves dropping techniques and counter measures Network security including firewalls. Networks and vulnerabilities, networking software Client side and server side, secure network infrastructure, security protocol layers create usage policy, conduct risk analysis, security violation and restoration. 2. Network security zone, encapsulation of network services, allocation of traffic control functions. 3. DNS Enumerations, Analysis of Deep web/ dark web. 4. IP security architecture, Security protocols, IPSec, Web Security – Firewalls, IDS IDPS – Types and Technologies. 5. Authentication Mechanisms: Passwords, Cryptographic authentication protocol Kerberos, X.509 LDAP Directory. Digital Signatures. Web Security: SSL Encryption TLS, SET. Intrusion detection. 	

Pedagogy: Lecture, Assignments, Interactive Sessions, ICT, Group Discussion

References	
1	Matt Bishop, “Computer Security Art and Science”, Pearson/PHI, 2002.
2	Nina Godbole and Sunit Belapore; “Cyber Security: Understanding Cyber Crimes, Computer Forensics and Legal Perspectives”, Wiley Publications, 2011.
3	Michael E Whiteman and Herbert J Mattord; “Principles of Information Security”, Vikas Publishing House, New Delhi, 2003.
4	Harish Chander; “Cyber Laws and IT Protection”, PHI Learning Pvt. Ltd, 2012.
5	Vakul Sharma; “Information Technology: Law and Practice”, Universal Law Publishing Co., India, 2011.
6	Bill Nelson, Amelia Phillips and Christopher Steuart; “Guide to Computer Forensics and Investigations” – 3rd Edition, Cengage, 2010 BBS.
7	LNJN National Institute of Criminology and Forensic Science, “A Forensic Guide for Crime Investigators – Standard Operating Procedures”, LNJN NICFS, 2016.
8	Cory Altheide and Halan Carvey; “Digital Forensics with Open Source Tools”, Syngress Publication.
9	Sherri Davidoff and Jonathan Ham; “Network Forensics – Tracking Hackers through Cyberspace”, Pearson Publications, 2012.
10	Aaron Philipp, David Cowen, Chris Davis; Hacking Exposed Computer Forensics Second Edition, McGraw Hill, USA, 2010.

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- <https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=MVs9IY38j6bxSw+ryrjUow==>
- <https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=MVs9IY38j6bxSw+ryrjUow==>
- <https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=MVs9IY38j6bxSw+ryrjUow==>
- <https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=MVs9IY38j6bxSw+ryrjUow==>
- <https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=MVs9IY38j6bxSw+ryrjUow==>
- <https://www.investopedia.com/terms/c/cloud-computing.asp>
- <https://online.maryville.edu/blog/cyber-crime-investigation>

DIGITAL FORENSIC EXAMINATION-II (PRACTICAL)

Course Title	Digital Forensic Examination-II (Practical)		Practical Credits	2
Course Code	DSC-6P		Contact Hours	56 Hrs
Summative Assessment	40 Marks	Formative Assessment	10 Marks	
Practical Content				
Unit-I Introduction to Digital Forensic Examination (30Hrs)				
1. Encrypting and decrypting the partition using Bit locker				
2. Analyzing hidden files and folders including slack space for evidence.				
3. Understanding Network Devices: Modem, Router, Switch, Hub, Repeater				
4. Email and IP Tracking Techniques				
Unit-II Examination Digital Data Sources (30Hrs)				
5. Understanding Data Packet Sniffers				
6. Open-Source Forensic Tools				
7. Disk Forensics and Data Recovery				

Pedagogy: Conduct experiments, applying forensic techniques

Formative Assessment for Practical	
Assessment Occasion/type	Marks
Record	10
Plan, Procedure & Conduction	10
Results & Discussion	05
Applying Forensic Techniques	05
Viva	10
Total	40 Marks

References	
1	LNJN National Institute of Criminology and Forensic Science, “A Forensic Guide for Crime Investigators – Standard Operating Procedures”, LNJN NICFS, 2016.
2	Cory Altheide and Halan Carvey; “Digital Forensics with Open Source Tools”, Syngress Publication.
3	Sherri Davidoff and Jonathan Ham; “Network Forensics – Tracking Hackers through Cyberspace”, Pearson Publications, 2012.

SEMESTER - VI

B.A/B.Sc. CRIMINOLOGY and FORENSIC SCIENCE

Title of the Course: CORPORATE AND TRANSNATIONAL CRIMES - DSC-8T

Number of Theory Credits	Number of Lecture Hours/Semester	Number of Practical Credits	Number of Practical Hours/Semester
03	56	02	56
CONTENT OF THEORY PAPER			56 Hrs
Unit – 1 INTRODUCTION TO CORPORATE CRIME			14
Chapter-1 Nature and Scope of Corporate Crime: <ol style="list-style-type: none"> 1. Meaning and definition 2. Characteristics of corporate crimes 3. Difference between white-collar crime and corporate crime Chapter-2 Causes and Theories of Corporate Criminal Behavior: <ol style="list-style-type: none"> 1. Individual and organizational motives 2. Opportunity, strain, and control theories 3. Role of corporate culture and competition Chapter 3: Corporate Crime in India – An Overview <ol style="list-style-type: none"> 1. Common types: Fraud, bribery, insider trading 2. Historical and recent Indian case studies (e.g., Satyam, Nirav Modi) 			
Unit – 2 CORPORATE FRAUDS AND REGULATORY FRAMEWORK			14
Chapter-4 Types of Corporate Frauds <ol style="list-style-type: none"> 1. Banking and financial frauds 2. Insurance frauds 3. Stock market manipulation and accounting scams Chapter-5 Legal and Regulatory Mechanisms in India <ol style="list-style-type: none"> 1. Overview: Companies Act, SEBI Act, PMLA, FEMA 2. Regulatory agencies: SFIO, SEBI, ED, RBI 3. Whistle-blower mechanisms and Lokpal Act 			
Unit - 3: INTRODUCTION TO TRANSNATIONAL CRIMES			14

Chapter 6: Understanding Transnational Crime <ol style="list-style-type: none"> 1. Definition and nature 2. Human trafficking, drug smuggling, arms trade 3. Impact of globalization and technology Chapter 7: Linkages between Corporate and Transnational Crimes <ol style="list-style-type: none"> 1. Offshore banking and tax havens 2. Shell companies and fake export-import scams 3. Role of corporations in environmental and labor exploitation 	
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Unit -4: ENFORCEMENT, INVESTIGATION, AND GLOBAL COOPERATION	14
Chapter 8: Investigative Mechanisms and Intelligence Sharing <ol style="list-style-type: none"> 1. Role of police, financial intelligence units (FIU) 2. Use of forensic auditing and cyber tools in detection 3. Know Your Customer (KYC), Suspicious Transaction Reports (STRs) Chapter 9: International Cooperation and Institutions <ol style="list-style-type: none"> 1. Role of INTERPOL, UNODC, FATF 2. Bilateral treaties and extradition 3. Global examples: Panama Papers, OECD guidelines 	

REFERENCES:

1. Gaur, K. D. (2015). *Criminal law and human rights*. Universal Law Publishing.
2. Srivastava, S. P. (2003). *White collar crime and corporate criminal liability*. Eastern Book Co.
3. Kumari, V. (2010). *The juvenile justice system in India: From welfare to rights*. Oxford University Press.
4. Rajan, V. N. (1981). *Victimology in India: An introductory text*. Allied Publishers.
5. UNODC. (2006). *Transnational organized crime: Threat assessment*. United Nations.

DIGITAL REFERENCE:

1. National Crime Records Bureau (NCRB): <https://ncrb.gov.in>
2. Ministry of Corporate Affairs (MCA): <https://www.mca.gov.in>
3. Enforcement Directorate: <https://enforcementdirectorates.gov.in>
4. INTERPOL: <https://www.interpol.int>
5. Financial Action Task Force (FATF): <https://www.fatf-gafi.org>
6. Journal: *Indian Journal of Criminology* – <http://www.iscjournal.in>
7. Journal: *The Prison Journal* – <https://journals.sagepub.com/home/prj>

PEDAGOGY: Lecture, Assignments, Interactive Session, ICT and Group Discussion.

Formative Assessment 40 (Theory Tests, Activities/Assignment/Seminar and Attendance)	
Assessment Occasion/Type	Weightage in Marks
Theory Test	10
Activity/Seminar/Presentation Assignment/Case Study/Field Work/Project Work (C2)	05+05=10
Total	20

SEMESTER - VI

B.A/B.Sc. CRIMINOLOGY and FORENSIC SCIENCE

Title of the Course: FORENSIC DACTYLOSCOPY AND DNA FINGERPRINTING - DSC-9T

Number of Theory Credits	Number of Lecture Hours/Semester	Number of Practical Credits	Number of Practical Hours/Semester
03	56	02	56
CONTENT OF THEORY PAPER			56 Hrs
Unit – 1 INTRODUCTION TO DACTYLOSCOPY			14
Chapter -1 Meaning of Dactyloscopy <ol style="list-style-type: none">1. Meaning and Scope; Print Science, Importance of Print Science,2. Morphology of Fingerprints and Footprints;3. Basic Features and Principles of Fingerprints4. Historical Development of Print Science.5. Organization of State and Central Fingerprint Bureaus, Embryo genesis.6. Dermatological formation and Diseases influence on the damages of fingerprints, Biometric uniqueness, and Finger prints as Evidence. Chapter -2 Classification of Finger Prints Patterns <ol style="list-style-type: none">1. Meaning and importance of classification of finger print patterns.2. Explaining various types of classification of Finger prints;3. Henry classification and its examination,4. secondary classification system,5. Sub secondary classification system,6. Secondary sub secondary classification system,7. Key classification,8. Final classification and Single digit classification system Chapter -3 Significance of palm prints <ol style="list-style-type: none">1. Significance of palm prints, Ridges and characteristics, Ridge counting, Minutiae, Poroscopy and Edgeoscopy,2. Characteristics of pores – size, position and latent print formation of pores			
Unit – 2 DEVELOPMENT OF FINGER PRINTS.			14

<p>Chapter – 4 Development of Finger Prints</p> <ol style="list-style-type: none"> 1. Types of Chance Prints at Scene of Crime 2. Development of Latent Finger Prints. <p>Chapter- 5 Physical Methods for Latent Fingerprint Development</p> <ol style="list-style-type: none"> 1. Powder Methods: Regular: - Black powder and white powder. Metallic: Aluminium powder and Magnetic black powder. Fluorescent: Greenescent and Pinkescen fluorescent powders. 2. Iodine Fuming Method. <p>Chapter-6 Chemical and Photography Methods for Fingerprint Development</p> <ol style="list-style-type: none"> 1. Gentian Violet, Cyanoacrylate and Silver Nitrate Method. 2. Ninhydrin Method etc. 3. Developing of Latent Prints and Visible prints by Slanting Photograph. <p>Chapter-7 Biometric, Digital Imaging and Green Methods</p> <ol style="list-style-type: none"> 1. Forensic application of Biometrics, Biometric Impression on Scanner/Live Scans. 2. Application of digital imaging process in Fingerprint science. 3. AFIS application in Police and Finger Print Bureau, Application of light sources in fingerprint detection. 	
Unit - 3: FOOT PRINTS	14
<p>Chapter- 8 Development of Foot Prints</p> <ol style="list-style-type: none"> 1. Meaning, Types, Importance 2. Tracing of surface foot prints, 3. Casting and lifting of surface and sub-sunken footprints 4. Gait pattern analysis – 5. Determination of Sex, Height, Age of a person 	
Unit -4: DNA FINGER PRINTS	14
<p>Chapter -9 Meaning and Importance of DNA Finger Prints</p> <ol style="list-style-type: none"> 1. Meaning of DNA Finger Prints and Scopes 2. Importance of DNA finger Prints 3. Legal procedure for conducting DNA finger Prints 4. Different type's cases conduct DNA Finger Prints <p>Chapter – 10 Legal provisions Of DNA Finger Prints.</p> <ol style="list-style-type: none"> 1. Source of DNA: Blood, Saliva, Hair, Skin Tissues and Nail etc. 2. The Criminal Procedure (Identification) Act, 2022 	

Pedagogy: Lecture, Assignments, Interactive Sessions, ICT, Group Discussion

References-Suggested Readings	
1	Andrew R.W.Jackson, Julie M Jackson, 2011, “Forensic Science”, Pearson Education Limited.
2	B.S.Nabar , 2001, forensic science in Crime Investigation”, Asia law House.
3	J C Upshaw Downs, Anjali Ranadive, Swienton , 2002, “Ethics in Forensic Science, Academic Press Publications.
4	Jay A Siegel, KatheyMirakovits, 2013, “Forensic Science: The Basics”, CRC press.
5	Jim Fraser, Robin Williams, 2013,”Hand book of Forensic Science”, Routldge publications.
6	Max.M.Houck, Jay A Siegal,2010, “Fundamentals of Forensic Science” Academic Press.
7	Andrew R.W.Jackson, Julie M Jackson, 2011, “Forensic Science”, Pearson Education Limited.
8	B.S.Nabar , 2001, forensic science in Crime Investigation”, Asia law House.
9	J C Upshaw Downs, Anjali Ranadive, Swienton, 2002, “Ethics in Forensic Science, Academic Press Publications.
10.	Jay A Siegel, KatheyMirakovits, 2013, “Forensic Science: The Basics”, CRC press.
11.	Walls H. J. (2nd Ed. 2008), – Forensic Science: An Introduction to Scientific Crime Detection, Universal Law Publishing Co. Pvt. Ltd. New Delhi-33
12.	Forensic Science in Criminal Investigation and Trials, B. R. Sharma
13.	John Townsend, 2008, “Forensic Evidence: Prints”, Crabtree Publishing House
14.	Bumbrah, G. S.; Small particle reagent (SPR) method fordetection of latent fingerprints: A review. Egyptian Journal ofForensic Sciences 2016, 6, 328. [CrossRef]
15.	Linda L Klepinger, 2006, “Fundamentals of Forensic Anthropolgy”, John wiley and sons

Web Sources:

<https://www.britannica.com/topic/dactyloscopy> <https://forensicfield.blog/dactyloscopy/>
https://www.researchgate.net/publication/355065615_Fingerprint_Development_Techniques_A_Review <https://www.wiley.com/en-us/Fingerprint+Development+Techniques:+Theory+and+Application-p9781119992615> <https://www.ijert.org/an-advanced-method-fingerprint-recognition-and-analysis-for-all-investigationindustrial-applications>
<https://www.taylorfrancis.com/chapters/mono/10.1201/9781420041347-7/methods-latentfingerprint-development-ashim-datta-henry-lee-robert-ramotowski-gaensslen>
<https://www.sciencedirect.com/science/article/abs/pii/S03031320395001069#:~:text=Fingerprints%20are%20classified%20into%20five,loop%2C%20right%20loop%20and%20whorl.>
https://www.cse.msu.edu/~cse802/Papers/802_FPCclassification.pdf

EXAMINATION OF FINGERPRINTS AND FOOTPRINTS (PRACTICAL)

Course Title	Examination of Fingerprints and Footprints (Practical)		Practical Credits	2
Course Code	DSC-7P		Contact Hours	56 Hrs
Summative Assessment	40 Marks	Formative Assessment	10 Marks	
Practical Content				
Unit-I Examination of Fingerprints (30 Hrs)				
1. Recording of fingerprints – Pattern analysis, 2. Identification of Ridge characteristics, 3. Ridge tracing & ridge counting, Comparison of fingerprints 4. Developing latent fingerprints – Physical methods & Chemical Methods				
Unit-II Examination of Footprints (26 Hrs)				
5. Recording of foot prints 6. Identification of Gait patterns 7. Tracing of surface footprints 8. Casting method of Sunken footprints				

Pedagogy: Conduct experiments, applying forensic techniques

Formative Assessment for Practical	
Assessment Occasion/type	Marks
Record	10
Plan, Procedure & Conduction	10
Results & Discussion	05
Applying Forensic Techniques	05
Viva	10
Total	40 Marks

References	
1	Andrew R.W.Jackson, Julie M Jackson, 2011, “Forensic Science”, Pearson Education Limited.
2	B.S.Nabar , 2001, Forensic science in Crime Investigation”, Asia law House.
3	J C Upshaw Downs, Anjali Ranadive, Swienton , 2002, “Ethics in Forensic Science, Academic Press Publications.

SEMESTER - VI

B.A/B.Sc. CRIMINOLOGY and FORENSIC SCIENCE

Title of the Course: FORENSIC PHOTOGRAPHY- DSC-10T

Number of Theory Credits	Number of Lecture Hours/Semester	Number of Practical Credits	Number of Practical Hours/Semester
03	56	02	56
CONTENT OF THEORY PAPER			56 Hrs
Unit – 1 INTRODUCTION FORENSIC PHOTOGRAPHY			14
Chapter-1 Forensic Photography: <ol style="list-style-type: none"> 1. Definition, meaning and Importance of Forensic Photography 2. Fundamentals of light and vision, light sources. 3. Historical Development of Forensic Photography Chapter- 2 Types of Photography: <ol style="list-style-type: none"> 1. Types of Photographic Devices 2. Usages of various Photographic Devices. Chapter 3: Exposure and Lighting Techniques <ol style="list-style-type: none"> 1. ISO, shutter speed, aperture (Exposure Triangle) 2. Natural vs. artificial lighting 3. Use of flash, fill-light, oblique and UV/IR lighting 			
Unit-2 TECHNIQUES AND APPLICATIONS IN CRIME SCENE PHOTOGRAPHY			14
Chapter 4: Crime Scene Documentation Protocols <ol style="list-style-type: none"> 1. Basic Principles of Photography 2. Photography in indoor and outdoor scene of crime and other modes of Crime scene 3. Pre-shoot checklist, photo log, photo placards 4. Overview to close-up photography 5. Chain of custody for digital images 6. Meaning and definition of Art factual evidences and its types. Chapter 5: Specialized Photographic Techniques <ol style="list-style-type: none"> 1. Macro photography for fingerprints, toolmarks 2. Low-light and night photography 3. Use of scale and evidence markers Chapter 6: Advanced Imaging Method <ol style="list-style-type: none"> 1. Ultraviolet (UV) and Infrared (IR) photography 2. Alternate Light Source (ALS) applications 3. 3D and panoramic imaging techniques 			

Unit - 3: EVIDENCE-SPECIFIC PHOTOGRAPHY	14
Chapter 7: Photography of Physical and Biological Evidence <ol style="list-style-type: none"> 1. Bloodstain patterns, injuries, trace evidence 2. Weapons, vehicles, footprints, and tool marks 3. Clothing, documents, and digital screens Chapter 8: Photography in Medico-Legal and Postmortem Contexts <ol style="list-style-type: none"> 1. Injury documentation (e.g., abrasions, contusions) 2. Autopsy photography: Identification, wounds, organs –(Visit to Hospital to show autopsy if any cases are available) 3. Sexual assault and child abuse cases: Protocols and sensitivity 	
Unit -4: DIGITAL IMAGING, ETHICS, AND LEGAL CONSIDERATIONS	14
Chapter 9: Digital Image Processing and Enhancement <ol style="list-style-type: none"> 1. RAW vs JPEG formats 2. Image editing: Acceptable limits vs manipulation 3. Metadata, watermarking, and digital storage protocols Chapter 10: Legal Admissibility and Ethical Considerations <ol style="list-style-type: none"> 1. Admissibility of photographic evidence under Bharatiya Sakshya Adhiniyam, 2023 (BSA 2023) 2. Image integrity and authentication 3. Modern developments in photography 4. Ethical guidelines for photographing victims and sensitive scenes 5. Testimony by forensic photographers in court. 	

Pedagogy: Lecture, Assignments, Interactive Sessions, ICT, Group Discussion

References	
1	Blitzer, H.L and Jacob, J; Forensic Digital Imaging and Photography, Academic Press,2002
2	Henry Horeustein; Colour Photography -A working Manual, Little Brown Co.Boston\ (1995).
3	B.H.E. Jacobson, Ray GG Attridge; The Manual of Photography, Focal Press, London (1988)
4	Jahne B; Digital Image Processing, Heidelberg Springer (1996).
5	Workinson J; Art of Digital Video, Oxford Focal Press (1994).
6	Upton Kobre, Brill; Photography, Pearson Education, Inc (2006).
7	H.L. Blitzer and J.Jacobia; Forensic Digital Imaging and Photography, Academic Press(2002)
8	David R.Redsicker; The Practical Methodology of Forensic Photography- 2nd Ed. CRCPress LLC (2001)
9	R.E. Jacobson, S.F.Ray, G.G.Attridge, The Manual of Photography- Photographic andDigital Imaging, N.R. Oxford
10	Blitzer, H.L and Jacob, J; Forensic Digital Imaging and Photography, Academic Press,2002

Web Sources:

- <https://www.definitions.net/definition/Forensic+photography>
- <https://www.forensicsciencesimplified.org/photo/>
- <https://www.skillshare.com/en/blog/a-brief-history-of-digital-photography/>
- <https://www.imagined.com/blog/what-is-digital-photography/>
- <https://forenscope.com/blog/forensic-science/forensic-photography/>

COMPULSORY INTERNSHIP

INTERNSHIP AREAS & TOPICS FOR CRIMINOLOGY & FORENSIC SCIENCE STUDENTS

1. Law Enforcement & Policing

Internship Title: *Police Procedure & Crime Investigation Internship*

- **Location:** Local Police Stations, District Crime Branches, Cyber Cells
- **Learning Topics:**
 1. FIR filing and documentation
 2. Crime scene preservation techniques
 3. Interrogation and interviewing methods
 4. Case diary and charge-sheeting process
 5. Traffic enforcement & preventive patrolling

2. Correctional Institutions

Internship Title: *Correctional Administration and Rehabilitation*

- **Location:** Central/State Jails, Open Prisons, Juvenile Homes
- **Learning Topics:**
 1. Prisoner classification and rehabilitation programs
 2. Legal rights of inmates
 3. Vocational training and counselling initiatives
 4. Prison records and visitor management
 5. Juvenile justice system practices in institutions

3. Forensic Laboratories

Internship Title: *Hands-on Forensic Lab Techniques*

- **Location:** State Forensic Science Laboratories (FSL), CFSL, DFSL
- **Learning Topics:**
 1. DNA extraction and analysis
 2. Fingerprint classification and comparison
 3. Ballistics, toxicology, and narcotics analysis
 4. Cyber forensics basics
 5. Report writing and lab protocols

4. Courts & Legal System

Internship Title: *Judicial Procedures and Victim Support Internship*

- **Location:** District Courts, Sessions Courts, Legal Aid Clinics
- **Learning Topics:**
 1. Observation of court proceedings (trial stages)
 2. Understanding bail, remand, and witness examination
 3. Victim compensation schemes
 4. Role of Public Prosecutor and defense lawyer
 5. Juvenile Justice Board procedures

5. NGOs / Human Rights Organizations

Internship Title: *Crime Prevention, Human Rights & Victim Advocacy*

- **Location:** NGOs working in Child Rights, Human Rights, Gender Justice
- **Learning Topics:**
 1. Crime prevention programs
 2. Gender-based violence and legal aid
 3. Victim assistance and rehabilitation
 4. RTI, PILs and legal awareness campaigns
 5. Documentation and case studies

6. Cyber Crime Cells

Internship Title: *Cybercrime and Digital Evidence Handling*

- **Location:** Cyber Police Stations, CERT-IN, Private Digital Forensic Labs
- **Learning Topics:**
 1. Identification of phishing, frauds, identity theft
 2. Data recovery and mobile forensics
 3. Cyber law and IT Act training
 4. Handling digital evidence for trial
 5. Preventive measures and awareness modules

7. Research Institutes & Think Tanks

Internship Title: *Criminological Research and Data Analysis*

- **Location:** NCRB, BPR&D, University Research Centres
- **Learning Topics:**
 1. Crime trend analysis
 2. Victim surveys and perception studies

3. Prison population studies
4. Policy writing and criminological research methods
5. Report preparation and presentation

8. Private Forensic & Investigation Firms

Internship Title: *Private Detective Work & Investigation Skills*

- **Location:** Licensed Private Investigation Agencies
- **Learning Topics:**
 1. Background verification and surveillance
 2. Pre/post-marital investigations
 3. Insurance claim investigations
 4. Undercover operations and field assignments
 5. Evidence documentation for civil/criminal litigation

QUESTION PAPER PATTERN

General Pattern of Criminology and Forensic Science Question Paper

Term End Examination for Discipline Paper Theory Each paper will be for maximum of 80 marks.

The minimum marks to pass the examination is 32 Marks in each theory paper

Note: Duration of Examination for Discipline Specific Core (DSC) paper is 3hours. Question paper pattern for Discipline Specific Core (DSC) paper

Section - A

I. Answer any **Ten** of the following questions. **(10x2=20).**

1, 2, 3, 4, 5, 6,7,8,9,10,11,12

Section - B

II. Answer any **Six** of the following questions.

(6x5=30).

13. 14, 15, 16, 17, 18, 19, 20

Section - C

III. Answer any **Three** of the following questions.

(3x10=30).

21, 22, 23, 24, 25.