**Model Curriculum Under NEP 2020** 

B.A/B.Sc Criminology and Forensic Science (Basic/Hons)

# And

(Five Years Integrated Program) in Criminology and Forensic Science

CHOICE BASED CREDIT SYSTEM

**III and IV Semester Syllabus (2022-23)** 

Submitted by

**Subject Experts Committee** 

2021-22 and Onwards

Karnataka State Higher Education Council (KSHEC), Government of Karnataka Bangaluru

## Acknowledgment

The Model Curriculum Framework work under NEP 2020 for **One Major and Minor with any subject** B.A/B.Sc Criminology and Forensic Science-(Hons) as well as **Single Major subject** (5 Years Integrated) in Criminology and Forensic Science, bears the imprints of many peoples, without whose support it would not have completed the task successfully.

First and foremost we would like to express our heartfelt gratitude to Prof.B.Thimme Gowda Vice-Chairman, Karnataka State Higher Education Council (KSHEC), Bangaluru for giving us an opportunity by constituting the subject experts committee with his continuous guidance and support for framing the Curriculum under NEP 2020.

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I specially thank the other committee members, Dr.G.S.Venumadhava Associate Professor, Chairman, Department of Studies in Criminology and Forensic Science, Karnatak University, Dharwad, Dr.J.L.Kalyan, Associate Professor and Head, Department of Criminology and Forensic Science, Karnatak Science College, Dharwad and Dr.K.S.Nagaraju, Associate Professor and Head, Department of Criminology and Forensic Science, Govt. First Grade College, K.R.Nagar for their contribution in framing the curriculum under NEP Guidelines.

> Prof. R. N. Mangoli Chairman, Syllabus Farming Committee In Criminology and Forensic Science, KSHEC, Bangaluru

## PREAMBLE

The Committee Members have been taken special care while framing the syllabus for **One Major and Minor with any subject** B.A/B.Sc Criminology and Forensic Science-(Hons) as well as **Single Major subject** (5 Years Integrated) in Criminology and Forensic Science as per the NEP 2020 guidelines. Particularly, Programme Outcomes (POs) as well as Course Outcome (COs) have been clearly outlined aiming to equip students with knowledge, skills, values, attitudes, leadership readiness/qualities and lifelong learning.

The fundamental premise of Programme Outcomes (POs) as well as Course Outcome (COs) are to specify what graduates completing a particular programme of study are expected to know, understand and be able to do at the end of their programme of study. Besides this, students will attain various 21<sup>st</sup> century skills like critical thinking, problem solving, analytic reasoning, cognitive skills, self directed learning etc.

To facilitate the process of curriculum under new NEP 2020 based on Programme Outcomes (POs) as well as Course Outcome (COs) approach, KSHEC has constituted subject specific Expert Committees to develop model curriculum. We feel happy to present the model curriculum to all the HEIs. Universities may revise the curriculum as per their requirement based on this suggestive model within the overall framework of Choice Based Credit System (CBCS) and Programme Outcomes (POs) as well as Course Outcome (COs).

Dr.G.S Venumadhava Member

Dr.J.L.Kalyan Member Dr.K.S.Nagaraju Member Prof.R.N.Mangoli Chairman

## B.A/B. Sc. Criminology and Forensic Science (Basic/Hons) CHOICE BASED CREDIT SYSTEM

Effective from 2021-22

## **Course Objectives**

Crime is one of the major social problems. It has posed a threat to social organization. To maintain peace, harmony and social order scientific approach to this problem is need of the hour. The problem of crime can be effectively tackled with the help of different agencies of Criminal Justice like Police, Prison, Law, Court and various other agencies. The study pertaining to different agencies of Criminal Justice is scientifically studied at the graduation level in Forensic Science and Criminology.

The students are exposed in this course on various aspects of Crime, Criminality, Reformation and Rehabilitation of Criminal, Victim of Crime, Victim Compensation, Victim Assistance and Restorative Justice to the parties concerned Victim of Crime, Criminal Law, Forensic Science, Criminal Investigation Techniques, Forensic Medicine and Toxicology and other branches.

Objectives of the study of this science are to make the students to understand the process of making laws, breaking of the laws, societal reaction to breaking of the laws and modern crimes. To understand the application of science in the Scene of Crime Management to identify and analyze the physical clues to establish the links between Crime Scene, Criminal and Victims.

To prepare the students to pursue their career in the State and Central Police Organization, Forensic Science Institutes, Law enforcement agencies and Judiciary. To pursue their career in Security Management, Vigilance, Private Investigations and Voluntary Organizations and prevent the occurrence of Crime.

It is a professional course with emphasis on development of necessary skills for a Criminological profession in police, forensic science, private security management, private detective work, corrections, and Juvenile Institutions.

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## IIA. Model Program Structures for the Under-Graduate Programs in Universities and Colleges in Karnataka

## B.A. / B.Sc. (Basic / Hons) Criminology and Forensic Science (With practical with one major and one minor)

Sem	Discipline Core (DSC)	re (DSC) Discipline Elective(DSE) / Ability Enhancement		Skill Enhancement Courses (SEC)				
	(Credits) (L+T+P)	Open Elective (OE) (Credits) (L+T+P)	Compulsory Courses (AECC), Languages (Credits) (L+T+P)		Skill based (Credits) (L+T+P)	Value based (Credits) (L+T+P)		Credits
Ι	DSC A1: Fundamental of Criminology (4+2) DSC B1:(4+2)	OE- 1.1. Police Organisation in India/ 1.2. Elements of Forensic Science (3)	L1-1(3), L2-1(3) (4 hrs each)	NIL	SEC-1: Digital Skills for Crime Data Analysis (2) (1+0+2)	Physical Education for fitness (1) (0+0+2)	Health & Wellness (1) (0+0+2)	25
II	DSC A2: Criminalistics (4+2) DSC B2(4+2)	OE- 2.1. Social Problems and Crime/ 2.2 Fingerprint Science (3)	L1-2(3), L2-2(3) (4 hrs each)	Environmental Studies (2)	NIL	Physical Education - Yoga (1) (0+0+2)	NCC/NSS/R&R(S&G) / Cultural (1) (0+0+2)	25
		Exit	option with	Certificate (50	credits)			
	DSC A3 Police Science & Criminal Investigation (4+2) DSC B3(4+2)	OE- 3.1. Gender and Crime 3.2. Crime Scene Investigation (3)	L1-3(3), L2-3(3) (4 hrs each)		SEC-2: Artificial Intelligence in Crime Investigation (2) (1+0+2)	Physical Education- Sports skills (1) (0+0+2)	NCC/NSS/R&R(S&G) /Cultural (1) (0+0+2)	25
	DSC A4 Correctional Administration (4+2) DSC B4(4+2)	OE- 4.1 Child Protection Laws 4.2 Cybercrimes and Cyber Laws (3)	L1-4(3), L2-4(3) (4 hrs each)	Constitution of India (2)		Physical Education - Games (1) (0+0+2)	NCC/NSS/R&R(S&G) /Cultural (1) (0+0+2)	25

<ul> <li>V DSCA5 Medical Jurispi and Toxicology</li> <li>DSCA6 Digital Forensics Cybercrime (3+2)</li> <li>DSC B5(3+2)</li> <li>VI DSC A7 Dactyloscopy ar DNA Fingerprinti</li> <li>DSC A8 Corporate Crime</li> <li>DSC B6(3+2)</li> </ul>	(3+2) and No Vocational-2 (3) ng (3+2) Internship (2)	SEC-3: Cyber Security (2) (1+0+2)20SEC-4: Investigative Journalism (2)22
	ا n with Bachelor of Arts. B.A./ Bachelor of S	B.Sc. Basic Degree (142 credits) or continue studies with the Major
VII DSC A9 Criminal Law (3 DSC A10 Physical & Bio Evidences (3+) DSCA11 Drug Addictio Narcotic Laws	3+2)DSE A,blogicalE-1.1 Community Policing & Crime Investigation2)Crime Investigationns andE-1.2 Forensic Document	
VIII DSC A12 Ballistics (3+2 DSC A13 Mass Media a Crime (3) DSC A14 Crime Scene Management	<ul> <li>DSE A,</li> <li>E-3.1 Chemical and Biometric Evidences</li> <li>E-3.2 Contemporary Forms of Crime</li> <li>E-3.3 Forensic Entomology</li> <li>E-3.4 Internship (3)</li> <li>Research Project (6)*</li> </ul>	
Award of	Bachelor of Arts Honours, B.A. (Hons.)/ Ba	of Science Honours, B.Sc. (Hons) degree in a discipline (184 credits)

**Note:** In lieu of the Research Project, two additional Discipline Specific Electives (DSE) papers/Internship may be offered in VIII Semester.

## Model Curriculum III and IV Semester (2022-23)

## B.A /B.Sc. CRIMINOLOGY AND FORENSIC SCIENCE (BASIC/HONS)

## Syllabus

Name of the Degree Program: B.A/B.Sc Criminology and Forensic Science (Basic/Hons) Discipline Core: Criminology and Forensic Science Total Credits for the Program: 184

## Program Outcomes: By the end of the program the students will be able to:

- 1. 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, victimology, criminal psychology, security management), and other related fields of study, including broader interdisciplinary subfields (forensic science, human rights, gender studies, sociology and law).
- 2. 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.
- 3. 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.
- 4. 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.
- 5. Recognize and appreciate the importance of Criminology and Forensic Science, its application in an academic, social, legal, industrial, economic and environmental context.

## The Second Year

Sem.	Discipline Core(DSC)	(Credits) (L+T+P)	-	(Credits) (L+T+P)	Skill Enhancement Courses (SEC)			rses (SEC)
			(OE)	< , ,	Skill based	(Credits) (L+T+P)		(Credits) (L+T+P)
	Core 3: Police Science and Criminal Investigation	(4+0+2)	OE- 3.1 Gender and Crime 3.2 Forensic Print Science	3	SEC-1: Artificial Intelligence in Crime Investigation	2		
Π	Core4: Correctional Administration	(4+0+2)	OE- 4.1. Child Protection Laws 4.2 Crime Scene Investigation	3				

- One core paper each semester
- Open elective papers for each semester(may be more than 1 per semester)
- Skill based skill enhancement courses in the first semester (preferably relating to computer skill)

Types of Course	Formative Assessment/IA	Summative Assessment
Theory	40	60
Practical	25	25
Projects	40	60
Experiencing Learning (Internship/Field Work Placements)	40	60

## **CURRICULUM STRUCTURE**

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

Seme ster	Name of the course	What all program outcomes the course addresses(not exceeding three per course)	Pre requisite course(s)	Concurrent course#	Pedagogy##	Assessment \$
	Investigation (4=2)	<ol> <li>A systematic disciplinary knowledge of the fundamental concepts of Police Science, analytical reasoning, and Criminal investigation</li> <li>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.</li> <li>Apply moral and ethical awareness/reasoning in detection crime and pertinent physical clues and evidences.</li> </ol>			ii. Interactive Sessions iii. Activities	i. Semester End Examination (Written) for 60 Marks ii. Internal Assessment for 40 Marks including (two written tests, Seminar, assignment/ attendance)
1						
2	Administration (4+2)	<ol> <li>A systematic understanding of the fundamental concepts, administration of Prison as correctional institutions, reformation and rehabilitation of inmates as good citizens,</li> <li>Apply appropriate knowledge with reflective thinking and to critical examine the conditions of jails.</li> <li>Apply relevant knowledge and analytical reasoning for the improvements and suggestions.</li> </ol>			<ul> <li>ii. Interactive</li> <li>Sessions</li> <li>iii. Activities</li> <li>(Seminar and</li> <li>Assignments,</li> <li>Outdoor</li> </ul>	i. Semester End Examination (Written) for 60 Marks ii. Internal Assessment for 40 Marks including (two written tests, Seminar, assignment/ attendance)
2						

#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 studylike seminar, term paper or MOOC)

\$Every course needs to include assessment for higher order thinking skills (Applying/Analysing / 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 (DSC)

DSC-A3: Police Science and Criminal Investigation (4)

Practicals-III (2)

DSC-B3:
DSC-A4: Correctional Administration (4)

Practicals -IV (2)

DSC-B4:

Open Electives

OE-3.1 Gender and Crime
3.2 Crime Scene Investigation (3)

OE-4.1Child Protection Laws 4.2 Cybercrimes and Cyber Laws (3)

## **Skill Enhancement**

SHC-2 Artificial Intelligence in Crime Investigation (2)

Course Articulation Matrix: Mapping of Course Outcomes (COs) with Program
Outcomes(POs1-12)

Course Outcomes (COs) / Program Outcomes(POs)	DSC 1	DSC2	OE 3.1	OE 3.2	OE 4.1	OE 4.2	SHC1
1. Disciplinary knowledge and skills	Х	Х	Х	X	Х	Х	
2. Skilled communicator	Х	Х	Х	Х	X	Х	X
3. Critical thinker and problem solver	Х	Х	Х	Х	X	Х	X
4. Team player/worker	Х	Х	Х	Х	Х	Х	Х
5. Skilled project manager	Х	Х	Х	Х	X	Х	Х
6. Digitally literate		Х		Х		Х	X
7. Analytical reasoning	Х	Х	Х	Х	X	Х	Х
8. Research-related skills	Х	Х	Х	Х	X	Х	Х
9. Multicultural competence	Х	Х	Х	Х	X	Х	Х
10. Moral, Ethical & Legal reasoning	Х	Х	Х	Х	X	Х	Х
11. Develop scientific temper and self-motivating learnings	Х	Х	Х	Х	Х	Х	Х
12. Lifelong learner		Х	Х	Х	X	Х	X

Course Articulation Matrix relates course outcomes of course with the corresponding program outcomes whose attainment is attempted in this course. Mark 'X' in the intersection cell if a course outcome addresses a particular program outcome.

#### Semester-III

### **B.A/B.Sc Criminology and Forensic Science**

#### Title of the course: DSCA3: Police Science and Criminal Investigation

### **Course Outcome:**

- Understand the concept and purpose of Police Science and its importance in crime prevention, investigation and maintaining social order peacefully.
- 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.

Number of Theory	Number of Lecture	Number of Practical	Number of practical
Credits	hours/semester	credits	hours/semester
4	56	4	56
	<b>Content of Theory course</b>		56hrs
Unit – 1 Introduction	14		
Chapter-1 Police admin			
	n Independent India, Consti	tutional provisions	
regarding polici	6		
	n International level		
Chapter-2 Policing in p			
	various styles of Policing		
Ethics in Policin	-		
<ul> <li>Technology and</li> </ul>			
Short comings of			
	ent, training and Police Refo	orms	
Policing in prese			
	es and challenges of Police		14
Chapter-3 Powers and c			
-	rs and duties of police offic	0	
	bility in India: Courts, Exec	0	
	AO, Citizens/ Community, 1	0	
-	c grievances, Police Compl	aints Authorities	
Chapter-4 Challenges in			
	ernal challenges in policing		
	olice Corruption, Police and	l Human Rights	
	hort comings and policing		14
Unit – 3 Criminal Inve	~ ~		14
Chapter-5Basics of Inve	-		
•	riminal Investigation	••	
	and role of Investigating off	icer	
Chapter-6 Legal proced	U		
0 1	ocedures in traditional, cont	emporary and special	
crimes	agistration of EID shares -	haat maaanding of	
	egistration of FIR, charge s		
	st, confession, summons and	u wallallis.	14
Unit -4 Crime scene In Chapter -7 Crime scene			14
-	of First responding officer.		
<ul> <li>Responsionnes</li> </ul>	or raise responding officer.		

• Crime scene – Types, search methods, photography and sketching.	
Chapter-8 Physical Clues	
• Types of physical clues and various crime scenes	
• Procedures in locating, handling, collecting, packing and	
forwarding of physical clues	

### **SUGGESTED READINGS:**

- 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
- 5. Nehad Ashraf, (1992), Police and Policing in India, Common Wealth Publishers, New Delhi

### 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

### DIGITAL REFERENCES

- 1. https://www.researchgate.net/publication/318324772\_POLICE\_SCIENCE\_SCIENCE\_OF\_TH E\_POLICE\_OR\_SCIENCE\_FOR\_THE\_POLICE\_-\_CONCEPTUAL\_CLARIFICATION\_AND\_TAXONOMY\_FOR\_COMPARING\_POLICE\_ SYSTEMS
- 2. https://www.ojp.gov/pdffiles1/nij/228922.pdf

https://www.researchgate.net/publication/340874515\_Police\_science\_as\_an\_emerging\_scientific\_di scipline.

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

Formative Assessment 40 (Weightage in Marks Activities/Assignment/Seminar/Presentation & A		ten Tests,	
Assessment Occasion/type	C1	C2	<b>Total Marks</b>
Written Test (2)	10	10	20
Seminar/Presentation/	10		10
Activity			
Case work/Assignment/Field work/Project work etc		10	10
Total	20	20	40

Date

Course Co-ordinator

## **Content of Practical Course DSC-3:**

Credits: 02 Marks: 40+10=50

#### List of Experiments to be conducted

- 1. Procedure and process of filing complaint to the Police Station
- 2. Scene of Crime Documentation: rough sketch, final sketch, photography and videography
- 3. Crime Scene Investigation Methods (Murder, Burglary, Traffic Accident etc)
- 4. Methods of Searching the Scene of Crime.
- 5. Reconstruction of Scene of Crime and report writing

Handling, packing and forwarding of physical clues to experts (Fingerprints on articles, Blood stains on articles, hair and fibre samples, Bullets & Cartridge

## Semester-III B.A/B.Sc Criminology and Forensic Science Title of the course: OE-3.1 Gender and Crime

### **Course Outcome:**

- Understand the meaning, nature and scope of Gender equality and crime.
- Describe the criminological explanation of gender and crime and their challenges.
- Understanding the various patterns of gender related crimes and its prevention.
- Explain the different types of gender related crimes against children.

Number of Theory	Number of Lecture	Number of Practical	Number of practical			
Credits	hours/semester	credits	hours/semester			
03	42		 42 hrs			
	Content of Theory course					
Unit – 1 Gender Equa			14			
Chapter-1 Gender awar						
	ne: Meaning, nature and sco	ope				
	ess in Criminology					
Chapter-2 Gender gap i						
	: Meaning, definition					
Gender equality	and Crime					
Cognitive capac						
	sures and gender					
	fic crimes and Criminolog		14			
	cal theories of gender and cr	rime				
Chapter-4 Gender in Cr	-					
Crimes and Cult	tural Views					
<ul> <li>Legal system</li> </ul>						
Police practice						
• Court trials						
Chapter-5 Patterns of C						
Meaning, defini						
-	vays to offending					
-	Crime, Men and Crimes					
• Female patterns	-					
Rising female cr	•					
Male patterns of	6					
Reasons for male crimin						
	t gender specific children		14			
Chapter-7 Crimes again						
-	ition, Nature and Scope					
	f gender-based violence on					
-	acts of gender-based violen	ce against children				
Chapter-8 Types of Crin	•					
Infanticides and						
Child trafficking						
Child pornograp	-					
Labour and stree						
<ul> <li>Various procedu</li> </ul>	ral rules for protection of c	hildren				

#### **SUGGESTED READINGS:**

- Fitz-Gibbon, K. &Walklate, S. (2018). Gender, Crime and Criminal Justice, Routledge, ISBN: 9781138656376
- 2. Mukharjee, S. K. & Scutt, J. A. (1981). Women and Crime, Routledge, ISBN: 9781138186569
- 3. Silvestri, M. & Crowther-Dowey, C. (2008). Gender and Crime (A Key Approach to Criminology), SAGE Publications
- 4. Britton, D. M. (2011). The Gender of Crime, Rowman & Littlefield
- 5. Evans, K & Jamieson, J. (2008). Gender and Crime: A Reader, Open University Press

#### JOURNAL REFERENCES

- 1. Child mal treatment-SAGE
- 2. International journal on child mal treatment-Springer
- 3. Women and Criminal Justice Taylor and Francis
- 4. Feminist Criminology-SAGE
- 5. Violence and Gender

#### DIGITAL REFERENCES

- 1. <u>Gender-Based Violence: A Global Threat | Save the Children</u>
- 2. <u>https://www.open.edu/openlearncreate/mod/oucontent/view.php?id=53771&printable=1</u>
- 3. (PDF) Gender and Crime: Toward a Gendered Theory of Female Offending (researchgate.net)
- 4. <u>https://ijcst.journals.yorku.ca/index.php/ijcst/article/download/39737/35977</u>
- 5. <u>Gender and Theories of Delinquency Oxford Handbooks</u>

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

Formative Assessment 40 (Weightage in Marks Activities/Assignment/Seminar/Presentation &		ten Tests,	
Assessment Occasion/type	C1	C2	Total Marks
Written Test (2)	10	10	20
Seminar/Presentation/	10		10
Activity			
Case work/Assignment/Field work/Project		10	10
work etc			
Total	20	20	40

Date

Course Co-ordinator

### Semester-III

## **B.A/B.Sc Criminology and Forensic Science Title of the course: OE-3.2Crime Scene Investigation**

#### **Course Outcome:**

- Understand the methods of securing, searching and documenting crime scenes.
- Capable to do the art of collecting, packaging and preserving different types of physical and trace evidence at crime scenes.
- Describe the legal importance of chain of custody.
- Understand the tools and techniques for analysis of different types of crime scene evidence.

Number of Theory	Number of Lecture	Number of Practical	Number of practical
Credits	hours/semester	credits	hours/semester
03	42		
	Content of Theory course	ļ	42 hrs
Unit – 1 Crime Scene			14
Chapter-1 Crime Scene	and its importance.		
_	ypes of crime scenes		
<ul> <li>indoor and outd</li> </ul>	loor Mobile		
<ul> <li>primary second</li> </ul>	ary and tertiary.		
	isolating the crime scene.		
Crime scene sea			
Safety measures	at crime scenes.		
Legal considerat	tions at crime scenes.		
Unit – 2 Crime Scene I	Documentation		14
	Documentation and its impo	ortance	- '
-	nentation of crime scenes		
• Photography.			
• Videography,			
• Sketching and			
Recording notes	S.		
Chapter-4 Duties of firs	t responders at crime scene	s	
-	tween police personnel and		
crime scenes.	tween ponee personner and	Torensie scientists at	
	of 5Ws (who?, what?, when	? where? why?) and	
1H (how?).	n 5 w 5 (who:, what:, whom	., where, why ) and	
Unit -3Crime Scene Ev	vidence Management.		14
	of crime scene evidence		
-	e and Importance.		
<ul> <li>Physical evidence and</li> </ul>			
• Trace evidence.			
Chapter- 6 Collection, la	abelling, sealing of evidence	2.	
Hazardous evide	ence.		
Preservation of e	• Preservation of evidence.		
Chain of custody			
Reconstruction	of crime scene.		

#### **SUGGESTED READINGS:**

- 1. M. Byrd, Crime Scene Evidence: A Guide to the Recovery and Collection of Physical Evidence, CRC Press, Boca Raton (2001).
- 2. T.J. Gardener and T.M. Anderson, Criminal Evidence, 4th Ed., Wadsworth, Belmont (2001).
- 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. W.J. Tilstone, M.L. Hastrup and C. Hald, Fisher's, Techniques of Crime Scene Investigation, CRC Press, Boca Raton (2013).

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

Formative Assessment 40 (Weightage in Marks includes: Written Tests, Activities/Assignment/Seminar/Presentation &Attendance)				
Assessment Occasion/type	C1	C2	<b>Total Marks</b>	
Written Test (2)	10	10	20	
Seminar/Presentation/	10		10	
Activity				
Case work/Assignment/Field work/Project		10	10	
work etc				
Total	20	20	40	

Date

Course Co-ordinator

## Semester-III

### **B.A/B.Sc Criminology and Forensic Science**

### Title of the Course: SEC-2Artificial Intelligence in Investigation

**Course Outcome:** 

- Understanding the Role and importance of Artificial Intelligence in Crime Investigation
- Explain the role of AI in Criminal Justice System
- Describing the application of AI in prevention & Detection of Crime
- Understanding various tool of AI in policing.

Number of	Number of	Number of	Number of	
Theory	lecture	practical	practical	
Credits	hours/semester	Credits	hours/semester	
2	28			
ContentofTheoryCourse1				
Unit-I: Introduction to Artificial Intelligence				
Chapter 1: Artifi	cial Intelligence:			
Concept	, Meaning and Definit	tion		
• Develop	ment of IA and its imj	portance		
• Applicat	ion of IA in Intelligen	ce		
Chapter 2: Artifi	cial Intelligence in Cr	ime investigation and	l Criminal	
Justice System				
Preventio	n of Crime through A	I		
• Detection	f Crime through AI			
Application	on of AI in CJS			
	ction to Tools of AI in	n Policing		14
Chapter-3 Surveillance System: Meaning and its importance in Policing				
-	s a tool of AI	ing and its important	e in i oneing	
	as a tool of AI			
• FRS as a				
	IS as tool of AI			
Chapter 4: Access Control System and IA				
• AI Barriers				
Biometric System				
Access Card				

#### **References:**

- 1. Alisha (2021) Use of ARTIFICIAL INTELLIGENCE in Criminal Justice System, First edition Bluerose Publishers Pvt. Ltd.
- 2. Dennis J. Baker, Paul H. Robinson (2020) Artificial Intelligence and the Law: Cybercrime and Criminal Liability, 1<sup>st</sup>Edn, Routledge Publications.
- 3. Elaine Rich (1991) Artificial Intelligence, 2<sup>nd</sup>Edn, Micgraw-Hill Publications.
- 4. Patterson W Dan (1990) Introduction to Artificial Intelligence and Expert Systems, Prentice-Hall Publications.
- 5. Padhy N P (2005) Introduction to Artificial Intelligence and Intelligent Systems, Oxford Publication

#### Journals:

1. Thomas C. King, Nikita Aggarwal, Mariarosaria Taddeo & Luciano Floridi "*Artificial intelligence crime: an interdisciplinary analysis of foreseeable threats and solutions*" Science and Engineering Ethics 26 (1):89-120 (2020)

#### **Digital References:**

- 1. <u>https://www.researchgate.net/publication/331099286\_Artificial\_Intelligence\_Crime\_An\_I\_nterdisciplinary\_Analysis\_of\_Foreseeable\_Threats\_and\_Solutions</u>
- 2. <u>https://www.researchgate.net</u>

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

Formative Assessment 40 (Weightage in Marks Activities/Assignment/Seminar/Presentation &		ten Tests,	
Assessment Occasion/type	C1	C2	Total Marks
Written Test (2)	05	05	10
Seminar/Presentation/	05		05
Activity			
Case work/Assignment/Field work/Project		05	05
work etc			
Total	10	10	20

Date

Course Co-ordinator

### SemesterIV B.A/B.Sc Criminology and Forensic Science

## Title of the Course: DSC A4: Correctional Administration Course Outcomes:

- Understand about the meaning, concept and scope of penology and Correctional Administration.
- Explain the theories and types of punishments in the past and present in India and abroad.
- Describing the prison as institution of correction, its types and the legal provisions
- Understanding the concepts of non-institutional treatments of prisoners.

Number of Theory	Number of Lecture	Number of Practical	Number of practical
Credits	hours/semester	credits	hours/semester
04	56	02	56
	<b>Content of Theory course</b>		56hrs
Unit – 1 Introduction	to Correctional Administ	ration	14
Chapter-1 Penology and correctional administration			
Penology – Defi	nition, nature and scope		
• Correction – Definition, nature and scope			
Types of punish	ment.		
Similarities and	Differences between punis	hment and correction	
Chapter-2 Theories of F	Punishment		
Detterance theory	ту		
• Retributive theo	ry		
Preventive theor	У		
Reformation the	ory		
Unit – 2 Prison system			14
Chapter-3 Prison and prison organization			
Historical development of prison system.			
Objectives of Imprisonment			
• Types of prisons and correctional institutions in India.			
	of Prisons in India; Reforma	ation & Rehabilitation	
approach in Pris			
Chapter-4 Prison reform			
•	lution of prison legislations		
	n of different committees of	on reformation system.	
Prison act and p			
Unit – 3 Institutionalized treatment			14
Chapter-5 Corrections through Institutionalized treatment			
Meaning and purpose			
• Types of institutions: Adult, women and children			
• Facilities provided in institutions.			
<ul> <li>Remission, temporary release and premature release</li> </ul>			
Chapter-6 Legal provisi	-		
• Legal Rights of	-		
_	rovisions of prisoners		
Nelson Mandela	rules for the treatment of p	prisoners	

Unit -4 Non Institutionalized treatment for prisoners	14
Chapter -7 Community based corrections	
Probation: Concept, history and scope	
Parole: Concept, history and scope	
After care services	
Restitution and fine	
Chapter-8 Miscellaneous	
• Standard minimum rules for non custodialmeasures(Tokyo rules)	
Role of NGOs in reformation and rehabilitation	

## **RECOMMENDED READINGS:**

- 1. Edelston, C.D. & Wicks, R.I. (1977), An Introduction to Criminal Justice, McGraw Hill.
- 2. Krishna Mohan Mathur, (1994), Indian Police, Role and Challenges, Gyan Publishing House, New Delhi.
- 3. Bhattacharya S.K., (1986). Probation system in India, Manas Publications, New Delhi.
- 4. Brodie, S.R., (1976). Effectiveness of sentencing, Home office, London.
- 5. Paranjepe, N.V., (2002). Criminology and Penology, Central Law Publications, Allahabad.

### JOURNAL REFERENCES

- 1. The Prison Journal-SAGE
- 2. International Journal of Prisoner Health
- 3. Journal Of Correctional Health Care

### DIGITAL REFERENCES

- 1. <u>http://kamarajcollege.ac.in/Department/Criminology/II%20Year/003%20Core%205%20-</u>%20Penology%20&%20Correctional%20Administration%20-%20III%20Sem.pdf.
- 2. https://www.scribd.com/document/408782187/Notes-on-Correctional-Administration-2017.
- 3. https://www.academia.edu/34249101/Notes\_on\_Correctional\_Administration.
- 4. https://bprd.nic.in/WriteReadData/userfiles/file/5261991522-Part%20I.pdf.

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

Formative Assessment 40 (Weightage in Marks includes: Written Tests, Activities/Assignment/Seminar/Presentation &Attendance)			
Assessment Occasion/type	C1	C2	<b>Total Marks</b>
Written Test (2)	10	10	20
Seminar/Presentation/	10		10
Activity			
Case work/Assignment/Field work/Project work etc		10	10
Total	20	20	40

Date

Course Co-ordinator

#### Semester-IV

#### **Content of Practical Course DSC-A4:**

#### Credits: 02 Marks: 40+10=50

#### List of Field Based Practicals to be conducted

- 1. To visit and study the overview of Prison as a correctional institution
- 2. To visit and study the reformatory measures, training and rehabilitation process.
- 3. To visit and study various facilities provided in Prison
- 4. To visit and study the non-institutional treatment programmes
- 5. To visit and study the functions and powers of JJB and CWC
- 6. To visit and study the functions and powers of Probation
- **7.** To visit and study the aftercare services and other NGOs working toward reformation, rehabilitation and resocialization of inmates.

#### Semester-IV

## **B.A/B.Sc Criminology and Forensic Science**

#### Title of the course: O. E 4.1 Child Protection Laws

#### **Course Outcomes:**

- Understand the legal and constitutional definition of child and issues and problems of their development stage.
- Describe the role of various social institutions in the child protection and its importance.
- Understanding the powers and functions of Juvenile Justice Board and Child Welfare Committees mentioned under Juvenile Justice Board.
- Explain the crime against children and related laws and guidelines.

Number of Theory	Number of Lecture	Number of Practical	Number of practical
Credits	hours/semester	credits	hours/semester
03	42		
	Content of Theory course		42hrs
Unit – 1 Introduction	to Child, their Protection	and Laws	14
Chapter-1 Child: Meani	ng and Definition		
<ul> <li>Legal and consti</li> </ul>	tutional definitions of child	1	
-	stages of childhood		
• Theories in child	l development		
	mining Well Being and De	velopment Of Children	
Adult-child relat		-	
• Protection, care	1		
• Factors affecting	development and well-bei	ng of children	
Chapter-3 Child Protect	ion	0	
• Meaning, definition, nature and scope			
• Role of family, school, society, NGOS and government in child			
protection.			
Chapter-4 Legislations,	Policies and Programmes		
1	rovisions for children		
• UNCRC, other r	elevant conventions and		
National policies	s in child protection		
Unit – 2Juvenile Justic	e System		14
Chanton 5 Internet in the state			
Chapter-5Juvenile Justi			
<ul> <li>Salient features of JJ act</li> <li>Proceedures while dealing with shildren in conflict with law</li> </ul>			
<ul> <li>Procedures while dealing with children in conflict with law</li> <li>Procedures while dealing with children in need are and protection</li> </ul>			
• Procedures while dealing with children in need care and protection Chapter-6 Commissions for Protection Of Child Rights Act 2005			
-		-	
• Role, functions and powers of national commission and state commissions in protection of child rights			
	of integrated child protection	on scheme	
- Sanoni realutes			

Unit -3 Crimes against children	14
Chapter -7 Crimes against children	
• Crimes against children in family, schools and public places	
Child labour ad street offences	
• Child trafficking, prostitution and pornography etc	
Chapter-8 Special Laws for Crimes Against Children	
Prohibition of child marriage act	
Protection of children from sexual offences	
• Child labour (prohibition and prevention) act	
United NationsStandard Minimum Rules for Juvenile Justice	
(Beijing rules)	
• UN Riyadh Guidelines etc.	

## **SUGGESTED READINGS:**

- Chaudhary, N. (2004) Listening to Culture: Constructing Reality from Everyday Talk, New Delhi: Sage.
- 2. Bakshi, I. (1999) Understanding Children and their Problems, Mumbai: Vakils, Feffer and Simons Ltd. Empson, J. M.,
- 3. Nabuzoka D. (2003) A typical Child Development in Context, New York: Palgrave Macmillan Butler, I. and Roberts, G. (2004) Social Work with Children and Families: Getting into Practice, Second Edition, London: Jessica Kingsley Publishers.
- 4. Holt, J. (1974) Escape from Childhood, Bhopal: Eklavya Institute for Educational Research and Innovative Action with permission from Hold Associates, Boston
- 5. Chandru, K., Geetha, R. & Thanikachalam, C. (1998) Child Law in India, Chennai: Indian Council for Child Welfare.
- 6. Verhellen, E. (2006) Convention on the Rights of the Child, London: Garant Publishers.
- 7. Joachim, T. (2004) Promoting Rights Based Approaches: Experiences and Ideas from Asia and the Pacific, Sweden: Save the Children

## JOURNAL REFERENCES

- 1. Child abuse and neglect-Elsevier
- 2. Child welfare journal-CWLA
- 3. Child mal treatment-SAGE
- 4. International journal on child mal treatment-Springer

## DIGITAL REFERENCES

- 1. <u>https://legalstudymaterial.com/child-protection-law-policy/</u>
- 2. <u>https://www.unicef.org/media/63086/file/UNICEF-Teaching-and-learning-about-child-rights.pdf</u>
- 3. <u>https://www.routledge.com/Childrens-Rights-and-the-Law-An-Introduction/Barnett/p/book/9781138321250</u>
- $4. \ \underline{https://www.open.edu/openlearncreate/mod/oucontent/view.php?id=53771\&printable=1$

Pedagogy: Lecture, Assignments, Interactive Sessio	ons, ICT, Group Discussion
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Assessment Occasion/type	<u>(ttendance)</u> C1	C2	Total Marks
Written Test (2)	10	10	20
Seminar/Presentation/ Activity	10		10
Case work/Assignment/Field work/Project work etc		10	10
Total	20	20	40

Date

Course Co-ordinator

#### Semester-IV

#### **B.A/B.Sc Criminology and Forensic Science**

#### Title of the course: OE-4.2 Cybercrimes and Cyber Law

#### **Course Outcomes:**

- Understand the meaning and fundamentals of computers, networking and its operating systems.
- Describe the different types of cybercrimes, cyber security in dealing with its detection.
- Understand the various types of cyber forensic tools in identifying and examination of digital evidences
- Explain the laws related to cybercrimes, its prevention and detection of cybercrimes

Number of Theory	Number of Lecture	Number of Practical	Number of practical
Credits	hours/semester	credits	hours/semester
03	42		
	<b>Content of Theory course</b>	2	42hrs
Unit – 1 Introduction	to Computer and network	king	14
Chapter-1 Fundamental	s of Computers and operati	ng system	
<ul> <li>Computers &amp; Networking – Basics of computers, its Definitions and classification</li> </ul>			
<ul> <li>Operating systems- Operating system and Function, Batch, Interactive, Time-sharing and Real-Time systems, CPU Scheduling         <ul> <li>Scheduling concept, algorithms and Performance criteria, memory management. File sharing, File System Implementation.</li> <li>Overview of Linux Operating System.</li> </ul> </li> </ul>			
Chapter-2 Basics of Net			
<ul> <li>Network Components - Server, client, routers, Shared Printers and other peripherals, Network Interface Card.</li> <li>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.</li> <li>IP addressing - types and classes. Types of Networks - LAN, MAN and WAN. Working of Wi-Fi and Bluetooth. Overview of cloud computing.</li> </ul>			
Unit – 2 Cyber-crime, cyber security& Cyber Forensics			14
<ul> <li>Chapter-3 Cyber Crime</li> <li>Cyber crime- meaning, definition and its classification</li> <li>Cybercrimes against Individuals – E-mail spoofing and online frauds, Phishing and its forms, Spamming, Cyber-defamation, Cybers talking, Cyber Bullying and harassment, Computer Sabotage, Pornography, Password Sniffing. etc</li> <li>Cyber Crimes against Women and Children.</li> <li>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.</li> </ul>			

Chapter-4 Cyber Security	
• 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.	
Chapter-5Digital Forensics: Meaning, Importance and Tools	
<ul> <li>Types of Computer Forensics Tools and its needs</li> </ul>	
<ul> <li>Computer Forensics Software Tools.</li> </ul>	
<ul> <li>UNIX/Linux Forensics Tools, Other GUI Forensics Tools,</li> </ul>	
Computer Forensics Hardware Tools, Forensic Workstations	
Unit -3 IT Act and other Laws for Cyber-crime	14
Chapter-6 IT Act 2000	
<ul> <li>Objectives, Applicability, Non-applicability, Definitions,</li> </ul>	
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.	
Chapter-7 Indian Evidence Act	
<ul> <li>Classification – civil, criminal cases. Essential elements of criminal law</li> </ul>	
• 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.	

## **SUGGESTED READINGS:**

- 1. John P. Hayes; "Computer Architecture and Organization", McGraw-Hill, 1988.
- **2.** V. Rajaraman and Niharika Adabala; "Fundamentals of Computers", 6th Edition, PHI Learning Pvt. Ltd., 2015.
- 3. Anita Goel; "Computer Fundamentals", Pearson Publications, 2010.
- 4. Beherouz. A Forouzan; "Data Communication and Networking", 4th Edition, TMH, 2000.
- 5. Andrew S.Tanenbaum; "Modern Operating Systems", 2nd edition, Addison Wesley, 2001.
- **6.** Gary Nutt; "Operating Systems: A Modern Perspective", 2nd edition, Pearson Education, 2001.
- 7. William Stallings; "Operating Systems: Internals and Design Principles", 5th Edition, Prentice Hall, 2005.
- **8.** Karnika Seth; "Computers, Internet and New Technology Laws", Lexis Nexis Buttersworth Wadhwa, 2012.
- 9. Vikas Vashishth.; "Law and practice of intellectual property in India"
- 10. Jonathan Rosenoer; "Cyber Law: The Law of Internet", Springer- Verlag, New York, 1997.
- 11. Sreenivasulu N.S; "Law Relating to Intellectual Property", Patridge Publishing, 2013
- 12. Pavan Duggal; "Cyber Law The Indian Perspective", Saakshar Law Publications.
- 13. Harish Chander; "Cyber Laws and IT Protection", PHI Learning Pvt. Ltd, 2012.

## JOURNAL AND SPECIAL ACTS REFERENCES

- 1. The Copyright Act, 1957
- 2. The Patent Act, 1970
- 3. The Indian Evidence Act, 1872

## DIGITAL REFERENCES

- 1. https://mrcet.com/pdf/Lab%20Manuals/IT/R15A0533%20CF.pdf.
- 2. <u>https://annamalaiuniversity.ac.in/studport/download/engg/it/resources/Cyber%20Forensics.pdf</u>
- 3. https://www.ifsedu.in/cyber-forensics-cyber-crimes-cyber-security-cyber-law/
- 4. https://lawbhoomi.com/cyber-law-notes/

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

Formative Assessment 40 (Weightage in Marks includes: Written Tests, Activities/Assignment/Seminar/Presentation &Attendance)								
Assessment Occasion/type C1 C2 Total Marks								
Written Test (2)	10	10	20					
Seminar/Presentation/	10		10					
Activity								
Case work/Assignment/Field work/Project		10	10					
work etc								
Total	20	20	40					

Date

Course Co-ordinator

## IIIA. Model Program Structures for the Under-Graduate Programs in Universities and Colleges inKarnataka

## Criminology and Forensic Science (5 Years Integrated) (With practical with Two Majors)

Sem	Discipline Core (DSC)	Discipline Elective(DSE) /	Ability Enhancement		Skill Enhancement Courses (SEC)			
	(Credits) (L+T+P)	Open Elective (OE) (Credits) (L+T+P)Compulsory Courses (AECC), Languages (Credits) (L+T+P)Skill based (Credits)Value based (Credits) (L+			(AECC), Languages (Credits)		) (L+T+P)	Credit
Ι	DSCA1: Fundamental of Criminology (4+2) DSC B1: Criminal Law (4+2)	OE- 1.1. Police Organisation in India/ 1.2. Elements of Forensic Science (3)	L1-1(3), L2-1(3) (4 hrs each)		SEC-1: Digital Skills for Crime Data Analysis (2) (1+0+2)	Physical Education for fitness (1) (0+0+2)	Health & Wellness (1) (0+0+2)	25
II	DSCA2: Criminalistics (4+2) DSCB2Fundamentals of Criminological Theories(4+2)	OE- 2.1. Social Problems and Crime/ 2.2 Fingerprint Science (3)	L1-2(3), L2-2(3) (4 hrs each)	Environmental Studies (2)		Physical Education - Yoga (1) (0+0+2)	NCC/NSS/R&R(S&G) / Cultural (1) (0+0+2)	25
		Exit	option with	Certificate (50	credits)			
	DSCA3 Police Science & Criminal Investigation (4+2) DSC B3 Law of Prints and Impression (4+2)	OE- 3.1. Gender and Crime 3.2. Crime Scene Investigation (3)	L1-3(3), L2-3(3) (4 hrs each)		SEC-2: Artificial Intelligence in Crime Investigation (2) (1+0+2)	Physical Education- Sports skills (1) (0+0+2)	NCC/NSS/R&R(S&G) /Cultural (1) (0+0+2)	25
	DSCA4 Correctional Administration (4+2) DSC B4Forensic Psychology& Criminal Profiling (4+2)	OE- 4.1 Child Protection Laws 4.2 Cybercrimes and Cyber Laws (3)	L1-4(3), L2-4(3) (4 hrs each)	Constitution of India (2)		Physical Education - Games (1) (0+0+2)	NCC/NSS/R&R(S&G) /Cultural (1) (0+0+2)	25

V	DSCA5 Medical Jurisprudence				SEC-3: Cyber		20
	and Toxicology (3+2)				Security (2)		
	DSCA5 Digital Forensics and				(1+0+2)		
	Cybercrime (3+2)						
	DSC B6 Juvenile Justice (3+2)						
	DSCB6 Victimology						
VI	DSC A7Dactyloscopy and				SEC-4:		22
	DNA Fingerprinting (3+2)				Investigative		
	DSC A7 Corporate Crime (3+2)				Journalism (2)		
	DSC B8Forensic Photography						
	(3+2)						
	DSC B8 Transnational Organised						
	Crimes(3+2)						
	Exit option with Ba	chelor of Arts, B.A./ Bachelor of	Science, B.Sc. Ba	sic Degree (142 cro	edits) or continue stu	dies with the Major	
VII	DSC A9 Forensic Entomology	DSE A,					22
	(3+2)	E-1.1 Community Policing &					
	DSC A10 Physical & Biological	Crime Investigation					
	Evidences (3+2)	E-1.2 Forensic Document					
	DSCA11 Drug Addictions and	Examination (3)					
	Narcotic Laws (3)	DSE A,					
		E-2.1 Forensic Psychology					
		E-2.2 Industrial Security					
		Management &					
		Detective Consultancy					
		(3)					
		RM-Criminological Research					
		Methodology and					
		Statistical Application (3)					
VIII	DSC A12 Ballistics (3+2)	DSE A,					20
	DSC A13 Mass Media and	E-3.1 Chemical and Biometric					
	Crime	Evidences					
	(3)	E-3.2 Contemporary Forms of					
	. ,	Crime					
	DSC A14 Crime Scene	E-3.3 Forensic Entomology					
	Management (3)	E-3.4 Internship (3)					
		Research Project (6)*					
	Award of Bachelor	of Arts Honours, B.A. (Hons.)/ B	achelor of Scienc	e Honours, B.Sc. (	Hons) degree in a disc	cipline (184 credits)	

Note: In lieu of the Research Project, two additional Discipline Specific Electives (DSE) papers/Internship may be offered in VIII Semester.

		DSE-A4.1 Advanced Fingerprint	20
	Criminology (3+2)	Development Methods	20
Γ	DSC-A16 G.T. Advanced Forensic	DSE-A4.2. Comparative	
		Criminology	
٢	DSC-A17 Correctional Social Work	DSE-A4.3 i Human Rights and Criminal Justice System	
	(4)	DSE-4.4 ii Forensic Anthropology and Odontology (3)	
		RM-Criminological Research	
		Methodology and	
		Statistical Application (3)	
χГ	DSC-A15 Advanced Forensic	DSE-A9 i. Financial Frauds and	20
r	Medicine and Toxicology (4)	Forensic Audits	
Γ	DSC-A16 Victimology (4)	DSE-A9 ii Laboratory Quality	
	DSC-A17 Case Studies of	Management	
		DSE-A9 iii Radical Criminology	
	Released Persons (3)	DSE-A9 iv Green Criminology (3)	
		Research Project (6)*	
Award	d of Master of Science M.Sc Degr	ee in a Discipline (224 Credits)	
		( <b>11</b> + <b>0</b>	

## Model Curriculum III and IV Semester (2022-23)

## **CRIMINOLOGY AND FORENSIC SCIENCE (5 Years) INTEGRATED**

## Syllabus

Name of the Degree Program: Criminology and Forensic Science (5 Years)Integrated Discipline Core: Criminology and Forensic Science Total Credits for the Program:224

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

- 1. 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).
- 2. 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.
- 3. 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.
- 4. 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.
- 5. Recognize and appreciate the importance of Criminology and Forensic Science, its application in an academic, social, legal, industrial, economic and environmental context.

## The Second Year

Sem.	DisciplineCore( DSC)	(Credits) (L+T+P)	OpenElecti ve(OE)	(Credits) (L+T+P)	Skill Enhancement Courses (SEC)			
					Skill based	(Credits) (L+T+P)	Vale based	(Credits) (L+T+ P)
	Core A3: Police Science and Criminal Investigation	(4+0+2)	OE- 3.1 Gender and Crime 3.2 Forensic Print		SEC-1: Artificial Intelligen ce in Crime	2		
	Core B3: Law of Prints & Impression		Science		Investigat ion			
IV	Core A4: Correctional Administration Core B4: Forensic Psychology & Criminal Profiling	(4+0+2)	OE- 4.1. Child Protection Laws 4.2 Crime Scene Investigatio n	3				

- One core paper each semester
- Open elective papers for each semester(may be more than 1 per semester)
- Skill based skill enhancement courses in the first semester (preferably relating to computer skill)

Types of Course	Formative Assessment/IA	Summative Assessment
Theory	40	60
Practical	25	25
Projects	40	60
Experiencing Learning (Internship/Field Work Placements)	40	60

## **CURRICULUM STRUCTURE**

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

Seme ster	Name of the course	What all program outcomes the course addresses(not exceeding three per course)	Pre requisite course(s)	Concurre nt course#	Pedagogy ##	Assessment\$
III		<ol> <li>A systematic disciplinary</li> <li>A systematic disciplinary</li> <li>knowledge of the fundamental concepts of Police Science, analytical reasoning, and Criminal investigation</li> <li>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.</li> <li>Apply moral and ethical awareness/reasoning in detection crime and pertinent physical clues and evidences.</li> </ol>			ii. Interactive Sessions iii. Activities (Seminar and Assignments, Outdoor learnings, Individual & Group	including (two written tests, Seminar, assignment/ attendance)
III		<ol> <li>A systematic disciplinary knowledge of various law of prints and impression</li> <li>Apply appropriate methodologies in order to conduct analytical skills and detect various fingerprint, footprints, lip prints to establish linkage between scene of crime, criminal and victims</li> </ol>			Method, ii. Interactive Sessions iii. Activities (Seminar and Assignments, Outdoor learnings,	assignment/

IV	Correctional	3, Apply moral and ethical awareness/reasoning in detection of invisible, visible fingerprints, footprints and lip prints as pertinent physical clues and evidences.			
IV	Correctional Administration (4+2)	<ol> <li>A systematic understanding of the fundamental concepts, administration of Prison as correctional institutions, reformation and rehabilitation of inmates as good citizens,</li> <li>Apply appropriate knowledge with reflective thinking and to critical examine the conditions of jails.</li> <li>Apply relevant knowledge and analytical reasoning for the improvements and suggestions.</li> </ol>		Method ii. Interactive Sessions iii. Activities (Seminar and Assignments, Outdoor learnings, Individual & Group	i Semester End Examination (Written) for 60 Marks ii Internal Assessment for 40 Marks including (two written tests, Seminar, assignment/att endance)
IV	Forensic Psychology & Criminal Profiling(4+2)	<ol> <li>A systematic disciplinary knowledge of the fundamental concepts of Forensic Psychology &amp; Criminal Profiling.</li> <li>Apply appropriate techniques in order to conduct analytical skills and detect patterns of serial crimes and method of operation (modus operandi) of criminal behavior</li> <li>Apply psychology to understand the mind of criminal. And suggest suitable precautions and plannings.</li> </ol>	NIL	Method ii. Interactive Sessions iii. Activities (Seminar and Assignments, Outdoor learnings, Individual & Group presentation)	including (two written tests, Seminar, assignment/ attendance)

#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 studylike seminar, term paper or MOOC)

\$Every course needs to include assessment for higher order thinking skills (Applying/Analysing / 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 (DSC)

DSC-A3: Police Science and Criminal Investigation (4) : Practicals-III (2) DSC-B3:Law of Prints and Impression (4) : Practicals-III (2) DSC-A4: Correctional Administration (4) : PracticalsIV (2) DSC-B4:Forensic Psychology & Criminal Profiling (4) : PracticalsIV (2) **Open Electives** OE-3.1 Gender and Crime

OE-3.1 Gender and Crime3.2 Crime Scene Investigation (3)OE-4.1Child Protection Laws4.2 Cybercrimes and Cyber Laws (3)

# **Skill Enhancement**

SHC-2 Artificial Intelligence in Crime Investigation (2)

# **Course Articulation Matrix: Mapping of Course Outcomes (COs) with Program Outcomes(POs1-12)**

Course Outcomes (COs) / Program Outcomes(POs)	DSC 1	DSC2	OE 3.1	OE 3.2	OE 4.1	OE 4.2	SHC1
1. Disciplinary knowledge and skills	Х	Х	Х	Х	Х	Х	
2. Skilled communicator	Х	Х	Х	Х	Х	Х	Х
3. Critical thinker and problem solver	Х	Х	Х	Х	Х	Х	Х
4. Team player/worker	Х	Х	Х	Х	Х	Х	Х
5. Skilled project manager	Х	Х	Х	Х	Х	Х	Х
6. Digitally literate		Х		Х		Х	Х
7. Analytical reasoning	Х	Х	Х	Х	Х	Х	Х
8. Research-related skills	Х	Х	Х	Х	Х	Х	Х
9. Multicultural competence	Х	Х	Х	Х	Х	Х	Х
10. Moral, Ethical & Legal reasoning	Х	Х	Х	Х	Х	Х	Х
11. Develop scientific temper and self-motivating learnings	Х	Х	Х	Х	Х	Х	Х
12. Lifelong learner		Х	Х	Х	Х	Х	Х

Course Articulation Matrix relates course outcomes of course with the corresponding program outcomes whose attainment is attempted in this course. Mark 'X' in the intersection cell if a course outcome addresses a particular program outcome.

## Semester-III

#### **B.A/B.Sc Criminology and Forensic Science**

#### Title of the course: DSCA3: Police Science and Criminal Investigation

#### **Course Outcome:**

- Understand the concept and purpose of Police Science and its importance in crime prevention, investigation and maintaining social order peacefully.
- 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.

Number of Theory	Number of Lecture	Number of Practical	Number of practical
Credits	hours/semester	credits	hours/semester
4	56	4	56
	<b>Content of Theory course</b>		56hrs
Unit – 1 Introduction	to Police Science		
Chapter-1 Police admin	istration in India		
	n Independent India, Consti	tutional provisions	
regarding policing	0		
	n International level		
Chapter-2 Policing in pr	resent scenario.		
	various styles of Policing		
Ethics in Policin	-		
Technology and	policing		
Short comings o	1 0		
Police recruitme	nt, training and Police Refo	orms	
Policing in prese	ent scenario		
	s and challenges of Police	1	
Chapter-1 Powers and d	luties		
-	rs and duties of police offic		
	oility in India: Courts, Exec	U ,	
	AO, Citizens/ Community, l	0	
-	c grievances, Police Compl	aints Authorities	
Chapter-2 Challenges in			
	ernal challenges in policing		
<b>U</b>	olice Corruption, Police and	l Human Rights	
	nort comings and policing		
Unit – 3 Criminal Inve	•		
Chapter-1 Basics of Inv	-		
Objectives of Criminal Investigation			
Characteristics and role of Investigating officer			
Chapter-2 Legal procedures in Investigation			
0 1	ocedures in traditional, cont	temporary and special	
crimes		1 1 2	
	egistration of FIR, charge s		
statements, arres	st, confession, summons and	d warrants.	

Unit -4 Crime scene Investigation	
Chapter -1 Crime scene Management	
• Responsibilities of First responding officer.	
• Crime scene – Types, search methods, photography and sketching.	
Chapter-2 Physical Clues	
<ul> <li>Types of physical clues and various crime scenes</li> </ul>	
• Procedures in locating, handling, collecting, packing and	
forwarding of physical clues	

- 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
- 5. Nehad Ashraf, (1992), Police and Policing in India, Common Wealth Publishers, New Delhi

# 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

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- 1. https://www.researchgate.net/publication/318324772\_POLICE\_SCIENCE\_SCIENCE\_OF\_TH E\_POLICE\_OR\_SCIENCE\_FOR\_THE\_POLICE\_-\_CONCEPTUAL\_CLARIFICATION\_AND\_TAXONOMY\_FOR\_COMPARING\_POLICE\_ SYSTEMS
- 2. https://www.ojp.gov/pdffiles1/nij/228922.pdf

https://www.researchgate.net/publication/340874515\_Police\_science\_as\_an\_emerging\_scientific\_di scipline.

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

Formative Assessment 40 (Weightage in Marks includes: Written Tests, Activities/Assignment/Seminar/Presentation &Attendance)			
Assessment Occasion/type	C1	C2	Total Marks
Written Test (2)	10	10	20
Seminar/Presentation/	10		10
Activity			
Case work/Assignment/Field work/Project work etc		10	10
Total	20	20	40

Date

Course Co-ordinator

# **Content of Practical Course DSC-3:**

## Credits: 02 Marks: 40+10=50

#### List of Experiments to be conducted

- 1. Procedure and process of filing complaint to the Police Station
- 2. Scene of Crime Documentation: rough sketch, final sketch, photography and videography
- 3. Crime Scene Investigation Methods (Murder, Burglary, Traffic Accident etc)
- 4. Methods of Searching the Scene of Crime.
- 5. Reconstruction of Scene of Crime and report writing
- 6. Handling, packing and forwarding of physical clues to experts (Fingerprints on articles, Blood stains on articles, hair and fibre samples, Bullets & Cartridge Cases)

#### Semester-III

#### **B.A/B.Sc Criminology and Forensic Science**

### Title of the course: DSCA4: Law of Prints and Impression

#### **Course Outcome:**

- Understand the various types of prints and impression, which plays a decisive role in examination, detection of culprit and their forensic importance in the court.
- Describe the type of fingerprints, identification, classification of patterns and ridge characteristics.
- Understanding the types of chance prints and their development by using physical and chemical methods.
- Become aware about other types of prints and impressions like footprints, tyre marks and Lip prints along their importance.

Number of	Number of Lecture	Number of Practical	Number of practical	
<b>Theory Credits</b>	hours/semester	credits	hours/semester	
4	56	4	56	
	Content of Theory course			
Unit – 1 Introduct	Unit – 1 Introduction to Fingerprints			
Chapter-1Fingerpri	ints: Meaning and importan	ce		
Historical d	evelopment.			
Principles of	of Dactyloscopy.			
<ul> <li>Organizatio</li> </ul>	on of State and			
	gerprint Bureaus.			
Chapter-2 Identific	ation and Classification of	Patterns		
-	of fingerprints.			
	on of patterns and ridge cha			
• Henry's Pri	mary and Secondary Class	ification.		
Unit – 2 Introduct	tion to Chance prints		14	
	orints: Meaning & Types.			
<ul> <li>Visible prin</li> </ul>				
Plastic Prin	ts			
Latent Print				
	nent of Chance Prints			
• Powder, Lie	quid & Gaseous Method			
• Recent Dev	elopments – Lifting & Pres	servation.		
Unit – 3 Introduct	tion to Footprints		14	
Chapter-5Footprint	s: Meaning and importance	2.		
• Types of fo	otprints.			
• Methods of	recording and lifting.			
• Gait pattern	l.			
Chapter-6Collectio	n of Footprints			
Photograph	у			
• Tracing				
<ul> <li>Lifting</li> </ul>				
Casting				

Unit -4 Other Impressions	14
Chapter -7Tyre Impressions: Meaning and importance in crime	
investigation.	
• Methods of recording and lifting.	
Skid marks and its importance	
• Length of the skid marks and measurement of vehicle speed	
Chapter-8 Lip prints	
• Nature,	
• location,	
• collection and examination oflip prints.	

- 1. J.E. Cowger, Friction Ridge Skin, CRC Press, Boca Raton (1983).
- 2. D.A. Ashbaugh, Quantitative-Qualitative Friction Ridge Analysis, CRC Press, Boca Raton (2000).
- 3. C. Champod, C. Lennard, P. Margot an M. Stoilovic, Fingerprints and other Ridge Skin Impressions, CRC Press, Boca Raton (2004).
- 4. Lee and Gaensleen's, Advances in Fingerprint Technology, 3rd Edition, R.S.Ramotowski (Ed.), CRC Press, Boca Raton (2013).
- 5. Nabar, B.S. 2007, Forensic Science in Crime Investigation, 3rd Edition, Asia Law House, Hyderabad.
- 6. Sharma B.R, 2007, Forensic Science in Criminal Investigation and Trials Universal Law Pub. Co. Pvt. Ltd.
- 7. Ramanujam T, 1992, Prevention and Detection of Crime, Madras Book Agency

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#### **DIGITAL REFERENCES**

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

Formative Assessment 40 (Weightage in Marks includes: Written Tests, Activities/Assignment/Seminar/Presentation &Attendance)				
Assessment Occasion/type	C1	C2	<b>Total Marks</b>	
Written Test (2)	10	10	20	
Seminar/Presentation/ Activity	10		10	
Case work/Assignment/Field work/Project work etc		10	10	
Total	20	20	40	

Date

Course Co-ordinator

# **ContentofPracticalCourseDSC-4:**

## Credits: 02 Marks: 40+10=50

#### List of Experiments to be conducted

- 1. To record plain and rolled fingerprints.
- 2. To identify different fingerprint patterns and identify core and delta.
- 3. To carry out ridge tracing and ridge counting.
- 4. To investigate physical and chemical methods of fingerprint detection.
- 5. To use different light sources for enhancing developed fingerprints.
- 6. To prepare cast and lifting of foot prints.
- 7. To tracing of surface footprints.

# Semester-III B.A/B.Sc Criminology and Forensic Science Title of the course: OE-3.1 Gender and Crime

# **Course Outcome:**

- Understand the meaning, nature and scope of Gender equality and crime.
- Describe the criminological explanation of gender and crime and their challenges.
- Understanding the various patterns of gender related crimes and its prevention.
- Explain the different types of gender related crimes against children.

Number of Theory	Number of Lecture	Number of Practical	Number of practical
Credits	hours/semester	credits	hours/semester
03	42		
	<b>Content of Theory course</b>	9	42 hrs
Unit – 1 Gender Equa			14
Chapter-1 Gender awar			
	ne: Meaning, nature and sco	ope	
	ess in Criminology		
Chapter-2 Gender gap i			
	: Meaning, definition		
Gender equality	and Crime		
<ul> <li>Cognitive capac</li> </ul>			
	sures and gender		
	fic crimes and Criminolog		14
	cal theories of gender and cr	rime	
Chapter-2 Gender in Cr	-		
Crimes and Cult	tural Views		
<ul> <li>Legal system</li> </ul>			
Police practice			
• Court trials			
Chapter-3 Patterns of C			
Meaning, defini			
-	vays to offending		
-	Crime, Men and Crimes		
• Female patterns	-		
Rising female cr	-		
Male patterns of	e		
Reasons for male crimin			
	t gender specific children		14
Chapter-1 Crimes again			
-	ition, Nature and Scope		
•	f gender-based violence on		
1	acts of gender-based violen	ce against children	
Chapter-2 Types of Crin	0		
Infanticides and			
Child trafficking			
<ul> <li>Child pornograp</li> </ul>	•		
Labour and stree			
Various procedu	aral rules for protection of c	hildren	

- Fitz-Gibbon, K. &Walklate, S. (2018). Gender, Crime and Criminal Justice, Routledge, ISBN: 9781138656376
- 2. Mukharjee, S. K. & Scutt, J. A. (1981). Women and Crime, Routledge, ISBN: 9781138186569
- 3. Silvestri, M. & Crowther-Dowey, C. (2008). Gender and Crime (A Key Approach to Criminology), SAGE Publications
- 4. Britton, D. M. (2011). The Gender of Crime, Rowman & Littlefield
- 5. Evans, K & Jamieson, J. (2008). Gender and Crime: A Reader, Open University Press

## JOURNAL REFERENCES

- 1. Child mal treatment-SAGE
- 2. International journal on child mal treatment-Springer
- 3. Women and Criminal Justice Taylor and Francis
- 4. Feminist Criminology-SAGE
- 5. Violence and Gender

# DIGITAL REFERENCES

- 1. <u>Gender-Based Violence: A Global Threat | Save the Children</u>
- 2. <u>https://www.open.edu/openlearncreate/mod/oucontent/view.php?id=53771&printable=1</u>
- 3. (PDF) Gender and Crime: Toward a Gendered Theory of Female Offending (researchgate.net)
- 4. <u>https://ijcst.journals.yorku.ca/index.php/ijcst/article/download/39737/35977</u>
- 5. <u>Gender and Theories of Delinquency Oxford Handbooks</u>

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

Formative Assessment 40 (Weightage in Marks includes: Written Tests, Activities/Assignment/Seminar/Presentation &Attendance)				
Assessment Occasion/type	C1	C2	<b>Total Marks</b>	
Written Test (2)	10	10	20	
Seminar/Presentation/	10		10	
Activity				
Case work/Assignment/Field work/Project work etc		10	10	
Total	20	20	40	

Date

Course Co-ordinator

# Semester-III

# **B.A/B.Sc Criminology and Forensic Science Title of the course: OE-3.2Crime Scene Investigation**

#### **Course Outcome:**

- Understand the methods of securing, searching and documenting crime scenes.
- Capable to do the art of collecting, packaging and preserving different types of physical and trace evidence at crime scenes.
- Describe the legal importance of chain of custody.
- Understand the tools and techniques for analysis of different types of crime scene evidence.

Number of Theory	Number of Lecture	Number of Practical	Number of practical
Credits	hours/semester	credits	hours/semester
03	42		
	<b>Content of Theory course</b>	2	42 hrs
Unit – 1 Crime Scene l	Preliminaries		14
Chapter-1 Crime Scene	and its importance.		
Meaning and T	ypes of crime scenes		
<ul> <li>indoor and outd</li> </ul>	oor Mobile		
<ul> <li>primary second</li> </ul>	ary and tertiary.		
Chapter-2 Securing and	isolating the crime scene.		
Crime scene sea	rch methods.		
Safety measures	at crime scenes.		
Legal considerat	tions at crime scenes.		
Unit – 2 Crime Scene l	Documentation		14
	Documentation and its imp	ortance	
_	nentation of crime scenes		
• Photography.			
• Videography,			
• Sketching and			
• Recording notes	5.		
Chapter-4 Duties of firs	t responders at crime scene	es.	
-	tween police personnel and		
crime scenes.			
	of 5Ws (who?, what?, when	n?, where?, why?) and	
1H (how?).			
Unit -3Crime Scene Ev			14
Chapter-5Classification	of crime scene evidence		
Locard principle	-		
Physical evidence	ce and		
• Trace evidence.			
-	abelling, sealing of evidence	e.	
Hazardous evide			
Preservation of e	evidence.		

٠	Chain of custody.	
٠	Reconstruction of crime scene.	

- 1. M. Byrd, Crime Scene Evidence: A Guide to the Recovery and Collection of Physical Evidence, CRC Press, Boca Raton (2001).
- 2. T.J. Gardener and T.M. Anderson, Criminal Evidence, 4th Ed., Wadsworth, Belmont (2001).
- 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. W.J. Tilstone, M.L. Hastrup and C. Hald, Fisher's, Techniques of Crime Scene Investigation, CRC Press, Boca Raton (2013).

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

Formative Assessment 40 (Weightage in Marks includes: Written Tests, Activities/Assignment/Seminar/Presentation &Attendance)					
Assessment Occasion/type	C1	C2	<b>Total Marks</b>		
Written Test (2)	10	10	20		
Seminar/Presentation/	10		10		
Activity					
Case work/Assignment/Field work/Project		10	10		
work etc					
Total	20	20	40		

Date

Course Co-ordinator

# Semester-III B.A/B.Sc Criminology and Forensic Science

# Title of the Course: SEC-2Artificial Intelligence in Investigation

**Course Outcome:** 

- Understanding the Role and importance of Artificial Intelligence in Crime Investigation
- Explain the role of AI in Criminal Justice System
- Describing the application of AI in prevention & Detection of Crime
- Understanding various tool of AI in policing.

Number of	Number of	Number of	Number of		
Theory	Lecture	practical	practical		
Credits	hours/semester	Credits	hours/semester		
2 28					
ContentofTheoryCourse1					
Unit-I: Introduo	ction to Artificial Intel	ligence		14	
Chapter 1:Artifi	cialIntelligence:				
• Concept	t, Meaning and Definiti	on			
• Develop	ment of IA and its imp	ortance			
• Applica	tion of IA in Intelligend	ce			
Chapter 2: Artificial Intelligence in Crime investigation and Criminal					
Justice System					
Prevention of Crime through AI					
Detection f Crime through AI					
Applicati	ion of AI in CJS				
Unit-II: Introdu	iction to Tools of AI in	Policing		14	
Chapter-3 Surve	eillance System: Meanin	ng and its importand	ce in Policing		
• CCTVs a	s a tool of AI	-			
• Cameras	as a tool of AI				
• FRS as a	tool of AI				
• GPS & GIS as tool of AI					
Chapter 4: Access Control System and IA					
• AI Barrie	ers				
• Biometrie	c System				
• Access C	ard				

#### **References:**

- 1. Alisha (2021) Use of ARTIFICIAL INTELLIGENCE in Criminal Justice System, First edition Bluerose Publishers Pvt. Ltd.
- 2. Dennis J. Baker, Paul H. Robinson (2020) Artificial Intelligence and the Law: Cybercrime and Criminal Liability, 1<sup>st</sup>Edn,Routledge Publications.
- 3. Elaine Rich (1991) Artificial Intelligence, 2<sup>nd</sup>Edn, Micgraw-Hill Publications.
- 4. Patterson W Dan (1990)Introduction to Artificial Intelligence and Expert Systems,Prentice-Hall Publications.
- 5. Padhy N P (2005)Introduction to Artificial Intelligence and Intelligent Systems, Oxford Publication

#### Journals:

1. Thomas C. King, Nikita Aggarwal, Mariarosaria Taddeo & Luciano Floridi "*Artificial intelligence crime: an interdisciplinary analysis of foreseeable threats and solutions*" Science and Engineering Ethics 26 (1):89-120 (2020)

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- 2. <u>https://www.researchgate.net</u>

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

Formative Assessment 40 (Weightage in Marks Activities/Assignment/Seminar/Presentation & A		ten Tests,	
Assessment Occasion/type	C1	C2	<b>Total Marks</b>
Written Test (2)	05	05	10
Seminar/Presentation/	05		05
Activity			
Case work/Assignment/Field work/Project work etc		05	05
Total	10	10	20

Date

Course Co-ordinator

## Semester IV B.A/B.Sc Criminology and Forensic Science

# Title of the Course: DSC A4: Correctional Administration Course Outcomes:

- Understand about the meaning, concept and scope of penology and Correctional Administration.
- Explain the theories and types of punishments in the past and present in India and abroad.
- Describing the prison as institution of correction, its types and the legal provisions
- Understanding the concepts of non-institutional treatments of prisoners.

Number of Theory	Number of Lecture	Number of Practical	Number of practical
Credits	hours/semester	credits	hours/semester
04	56	02	56
	<b>Content of Theory course</b>		56hrs
	to Correctional Administr		14
1 01	l correctional administration	n	
<ul> <li>Penology – Definition, nature and scope</li> </ul>			
	finition, nature and scope		
Types of punish	ment.		
	Differences between punish	hment and correction	
Chapter-2 Theories of P	Punishment		
Deterrence theory	ry		
Retributive theory	-		
Preventive theor	-		
Reformation the	<i>.</i>		
Unit – 2 Prison system			14
Chapter-1 Prison and pr	-		
Historical development of prison system.			
Objectives of Imprisonment			
• Types of prisons and correctional institutions in India.			
	of Prisons in India; Reforma	tion & Rehabilitation	
approach in Pris			
Chapter-2 Prison reform			
-	lution of prison legislations		
	n of different committees o	n reformation system.	
Prison act and p			
Unit – 3 Institutionaliz			14
	hrough Institutionalized tre	eatment	
Meaning and pu	-		
• -	ions: Adult, women and ch	ildren	
1	ed in institutions.		
	porary release and prematur	e release	
Chapter-2 Legal provisi	ons of prisoners		

Legal Rights of prisoners	
Constitutional provisions of prisoners	
Nelson Mandela rules for the treatment of prisoners	
Unit -4 Non Institutionalized treatment for prisoners	14
Chapter -1 Community based corrections	
Probation: Concept, history and scope	
Parole: Concept, history and scope	
After care services	
Restitution and fine	
Chapter-2 Miscellaneous	
• Standard minimum rules for non custodialmeasures(Tokyo rules)	
Role of NGOs in reformation and rehabilitation	

# **RECOMMENDED READINGS:**

- 1. Edelston, C.D. & Wicks, R.I. (1977), An Introduction to Criminal Justice, McGraw Hill.
- 2. Krishna Mohan Mathur, (1994), Indian Police, Role and Challenges, Gyan Publishing House, New Delhi.
- 3. Bhattacharya S.K., (1986). Probation system in India, Manas Publications, New Delhi.
- 4. Brodie, S.R., (1976). Effectiveness of sentencing, Home office, London.
- 5. Paranjepe, N.V., (2002). Criminology and Penology, Central Law Publications, Allahabad.

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- 1. The Prison Journal-SAGE
- 2. International Journal of Prisoner Health
- 3. Journal Of Correctional Health Care

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- 1. <u>http://kamarajcollege.ac.in/Department/Criminology/II%20Year/003%20Core%205%20-%20Penology%20&%20Correctional%20Administration%20-%20III%20Sem.pdf</u>.
- 2. <u>https://www.scribd.com/document/408782187/Notes-on-Correctional-Administration-2017</u>.
- 3. <u>https://www.academia.edu/34249101/Notes\_on\_Correctional\_Administration</u>.
- 4. <u>https://bprd.nic.in/WriteReadData/userfiles/file/5261991522-Part%20I.pdf</u>.

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

Formative Assessment 40 (Weightage in Marks includes: Written Tests, Activities/Assignment/Seminar/Presentation &Attendance)			
Assessment Occasion/type	<b>C1</b>	C2	<b>Total Marks</b>
Written Test (2)	10	10	20
Seminar/Presentation/	10		10
Activity			
Case work/Assignment/Field work/Project work etc		10	10
Total	20	20	40

# **Content of Practical Course DSC-A4:**

## Credits: 02 Marks: 40+10=50

#### List of Field Based Practicals to be conducted

- 1. To visit and study the overview of Prison as a correctional institution
- 2. To visit and study the reformatory measures, training and rehabilitation process.
- 3. To visit and study various facilities provided in Prison
- 4. To visit and study the non-institutional treatment programmes
- 5. To visit and study the functions and powers of JJB and CWC
- 6. To visit and study the functions and powers of Probation
- **7.** To visit and study the aftercare services and other NGOs working toward reformation, rehabilitation and resocialization of inmates.

# SemesterIV B.A/B.Sc Criminology and Forensic Science

## Title of the Course: DSCB4: Forensic Psychology and Criminal Profiling

#### **Course Outcomes:**

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

Number of Theory	Number of Lecture	Number of Practical	Number of practical
Credits	hours/semester	credits	hours/semester
04	56	02	56
Content of Theory course			56hrs
Unit – 1 Introduction to Forensic Psychology			14
1	d fundamental concepts of	forensic psychology	
and forensic	psychiatry.		
Psychology and	law.		
Ethical issues in	forensic psychology		
Assessment of n	nental competency.		
Mental disorder	s and forensic psychology.		
Chapter-2 Psychology o	of evidence		
<ul> <li>Eyewitness test</li> </ul>	imony,		
Confession evidence.			
Criminal profiling.			
<ul> <li>Psychology in t</li> </ul>	he courtroom, with special	reference to Section 84	
IPC.			
Unit – 2 Psychology an			14
Chapter-3Psychopathol	ogy and personality disord	er.	
<ul> <li>Psychological as</li> </ul>	ssessment and its importance	ce.	
Serial murderers	5.		
<ul> <li>Psychology of te</li> </ul>	errorism.		
Chapter-4Biological fac	ctors and crime		
• Social learning theories,			
Psycho-social fa	• Psycho-social factors,		
• Abuse.			
Chapter-5 Juvenile deli	nquency and Child Abuse		
Theories of offer	ending (social cognition, me	oral reasoning)	

• Child abuse (physical, sexual, emotional),	
• Juvenile sex offenders,	
Legal controversies.	
Unit – 3 Introduction to Personality Disorder	14
Chapter-5Personality: Meaning and its importance in life.	
Personality Development	
Personality disorders	
• Types and its impact on life.	
Chapter-6Therapy interfering behaviours	
• Various types of therapies to correct the behaviour	
• Cognitive Behaviour Therapy (CBT) to Family-focused therapy	
Unit -4 Detection of Deception	14
Chapter -7Tools for detection of deception –	
• Interviews,	
• Non-verbal detection,	
• Statement analysis,	
• Voice stress analyzer,	
• Hypnosis.	
Chapter-8Polygraphy Test	
• Operational and question formulation techniques, ethical and legal	
aspects, the guilty knowledge test.	
• Narco analysis and brain electrical oscillation signatures –	
principle and theory, ethical and legal issues.	
• Role of psychologist in metal related cases and legal framework.	

## **RECOMMENDED READINGS:**

- 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).
- 2. R. Saferstein, Criminalistics, 8th Edition, Prentice Hall, New Jersey (2004).
- 3. J.C. DeLadurantey and D.R. Sullivan, Criminal Investigation Standards, Harper & Row, New York (1980).
- 4. J. Niehaus, Investigative Forensic Hypnosis, CRC Press, Boca Raton (1999).
- 5. E. Elaad in Encyclopedia of Forensic Science, Volume 2, J.A. Siegel, P.J. Saukko and G.C. Knupfer (Eds.), Academic Press, London (2000).
- 6. David V. Canter Forensic Psychology For Dummies (2012)
- 7. Ilaria Cabula, Frank Paul E Criminology and Criminal Profiling for beginners: (crime scene forensics, serial killers and sects): 1 (Criminology, Criminal Profiling, Serial Killers) (2020)

#### **DIGITAL REFERENCES**

#### https://www.infobooks.org/free-pdf-books/psychology/criminal-psychology/

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

Formative Assessment 40 (Weightage in Marks includes: Written Tests,				
Activities/Assignment/Seminar/Presentation & Attendance)				
Assessment Occasion/type	C1	C2	<b>Total Marks</b>	
Written Test (2)	10	10	20	
Seminar/Presentation/	10		10	
Activity				
Case work/Assignment/Field work/Project 10 10				
work etc				

Total 20 20 40
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Date

Course Co-ordinator Subjec

Subject Committee Chairperson

# Semester-IV

# **Content of Practical Course DSC-B4:**

#### Credits: 02 Marks: 40+10=50

#### 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

# **B.A/B.Sc Criminology and Forensic Science**

## Title of the course: O. E 4.1 Child Protection Laws

#### **Course Outcomes:**

- Understand the legal and constitutional definition of child and issues and problems of their development stage.
- Describe the role of various social institutions in the child protection and its importance.
- Understanding the powers and functions of Juvenile Justice Board and Child Welfare Committees mentioned under Juvenile Justice Board.
- Explain the crime against children and related laws and guidelines.

Number of Theory	Number of Lecture	Number of Practical	Number of practical
Credits	hours/semester	credits	hours/semester
03	42		
	Content of Theory course		42hrs
Unit – 1 Introduction	to Child, their Protection	and Laws	
Chapter-1 Child: Meani	ng and Definition		
-	tutional definitions of child	1	
e	stages of childhood	I	
-	0		
• Theories in child		valormant Of Children	
-	mining Well Being and Dev	veropment Of Children	
Adult-child relat	1		
• Protection, care		C 1 11	
	g development and well-bei	ng of children	
Chapter-3 Child Protect			
•	tion, nature and scope		
• Role of family, school, society, NGOS and government in child			
protection.			
	Policies and Programmes		
Constitutional provisions for children			
,	elevant conventions and		
National policies in child protection			
Unit – 2Juvenile Justic	e System		
Chapter-5Juvenile Justi	ce act		
• Salient features			
<ul> <li>Procedures while dealing with children in conflict with law</li> </ul>			
<ul> <li>Procedures while dealing with children in reed care and protection</li> </ul>			
	s for Protection Of Child Ri	-	
1	and powers of national com	0	
	protection of child rights		
	of integrated child protection	on scheme	
	0		

Unit -3 Crimes against children	
Chapter -7 Crimes against children	
• Crimes against children in family, schools and public places	
Child labour ad street offences	
• Child trafficking, prostitution and pornography etc	
Chapter-8 Special Laws for Crimes Against Children	
Prohibition of child marriage act	
Protection of children from sexual offences	
• Child labour (prohibition and prevention) act	
United NationsStandard Minimum Rules for Juvenile Justice	
(Beijing rules)	
• UN Riyadh Guidelines etc.	

- 1. Chaudhary, N. (2004) Listening to Culture: Constructing Reality from Everyday Talk, New Delhi: Sage.
- 2. Bakshi, I. (1999) Understanding Children and their Problems, Mumbai: Vakils, Feffer and Simons Ltd. Empson, J. M.,
- 3. Nabuzoka D. (2003) A typical Child Development in Context, New York: Palgrave Macmillan Butler, I. and Roberts, G. (2004) Social Work with Children and Families: Getting into Practice, Second Edition, London: Jessica Kingsley Publishers.
- 4. Holt, J. (1974) Escape from Childhood, Bhopal: Eklavya Institute for Educational Research and Innovative Action with permission from Hold Associates, Boston
- 5. Chandru, K., Geetha, R. & Thanikachalam, C. (1998) Child Law in India, Chennai: Indian Council for Child Welfare.
- 6. Verhellen, E. (2006) Convention on the Rights of the Child, London: Garant Publishers.
- 7. Joachim, T. (2004) Promoting Rights Based Approaches: Experiences and Ideas from Asia and the Pacific, Sweden: Save the Children

# JOURNAL REFERENCES

- 1. Child abuse and neglect-Elsevier
- 2. Child welfare journal-CWLA
- 3. Child mal treatment-SAGE
- 4. International journal on child mal treatment-Springer

# DIGITAL REFERENCES

- 1. <u>https://legalstudymaterial.com/child-protection-law-policy/</u>
- 2. <u>https://www.unicef.org/media/63086/file/UNICEF-Teaching-and-learning-about-child-rights.pdf</u>
- 3. <u>https://www.routledge.com/Childrens-Rights-and-the-Law-An-Introduction/Barnett/p/book/9781138321250</u>
- $4. \ \underline{https://www.open.edu/openlearncreate/mod/oucontent/view.php?id=53771\&printable=1}$

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

Formative Assessment 40 (Weightage in Marks includes: Written Tests, Activities/Assignment/Seminar/Presentation &Attendance)			
Assessment Occasion/type	C1	C2	Total Marks
Written Test (2)	10	10	20
Seminar/Presentation/	10		10
Activity			
Case work/Assignment/Field work/Project		10	10
work etc			
Total	20	20	40

Date

Course Co-ordinator

#### Semester-IV

#### **B.A/B.Sc Criminology and Forensic Science**

#### Title of the course: OE-4.2 Cybercrimes and Cyber Law

#### **Course Outcomes:**

- Understand the meaning and fundamentals of computers, networking and its operating systems.
- Describe the different types of cybercrimes, cyber security in dealing with its detection.
- Understand the various types of cyber forensic tools in identifying and examination of digital evidences
- Explain the laws related to cybercrimes, its prevention and detection of cybercrimes

Number of Theory	Number of Lecture	Number of Practical	Number of practical
Credits	hours/semester	credits	hours/semester
03	42		
Content of Theory course			42hrs
Unit – 1 Introduction to Computer and networking			14
Chapter-1 Fundamentals of Computers and operating system			
• Computers & Networking – Basics of computers, its Definitions			
and classificatio			
	ns- Operating system and I		
Interactive, Time-sharing and Real-Time systems, CPU Scheduling			
- Scheduling concept, algorithms and Performance criteria,			
	ement. File sharing, File Sy	stem Implementation.	
	ux Operating System.		
Chapter-2 Basics of Net	•		
-	onents - Server, client, route s, Network Interface Card.	ers, Shared Printers and	
<ul> <li>Network Device</li> </ul>	s-hubs, Switches, routers	, repeaters. OSI model	
and TCP/IP mod	lel. Basic HTTP, World W	ide Web, Web	
Browsers, Web	Servers, Domain Names, U	RL and DNS.	
• IP addressing –	types and classes. Types of	Networks – LAN,	
MAN and WAN	. Working of Wi-Fi and Bl	uetooth. Overview of	
cloud computing	5.		
Unit – 2 Cyber-crime, cyber security& Cyber Forensics		14	
Chapter-3 Cyber Crime			
Cyber crime- m	eaning, definition and its c	lassification	
<ul> <li>Cybercrimes ag</li> </ul>			
frauds, Phishing	g and its forms, Spamming,	Cyber-defamation,	
	Cyber Bullying and harass	· ·	
Sabotage, Porno			
• Cyber Crimes a			
	inst organization – Unauth		
<b>1</b>	word Sniffing, Denial-of-se		
	Malwares and its types, E-1	0	
Attack, Softwar	e Piracy, Industrial Espiona	age, Intruder attacks.	

Chapter-4 Cyber Security		
• 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.		
Chapter-5Digital Forensics: Meaning, Importance and Tools		
• 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 -3 IT Act and other Laws for Cyber-crime	14	
Chapter-6 IT Act 2000		
<ul> <li>Objectives, Applicability, Non-applicability, Definitions,</li> </ul>		
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.		
Chapter-7 Indian Évidence Act		
• 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.		
SUGGESTED READINGS:		

- 1. John P. Hayes; "Computer Architecture and Organization", McGraw-Hill, 1988.
- **2.** V. Rajaraman and Niharika Adabala; "Fundamentals of Computers", 6th Edition, PHI Learning Pvt. Ltd., 2015.
- 3. Anita Goel; "Computer Fundamentals", Pearson Publications, 2010.
- 4. Beherouz. A Forouzan; "Data Communication and Networking", 4th Edition, TMH, 2000.
- 5. Andrew S.Tanenbaum; "Modern Operating Systems", 2nd edition, Addison Wesley, 2001.
- **6.** Gary Nutt; "Operating Systems: A Modern Perspective", 2nd edition, Pearson Education, 2001.
- 7. William Stallings; "Operating Systems: Internals and Design Principles", 5th Edition, Prentice Hall, 2005.
- **8.** Karnika Seth; "Computers, Internet and New Technology Laws", Lexis Nexis Buttersworth Wadhwa, 2012.
- 9. Vikas Vashishth.; "Law and practice of intellectual property in India"
- 10. Jonathan Rosenoer; "Cyber Law: The Law of Internet", Springer- Verlag, New York, 1997.
- 11. Sreenivasulu N.S; "Law Relating to Intellectual Property", Patridge Publishing, 2013
- 12. Pavan Duggal; "Cyber Law The Indian Perspective", Saakshar Law Publications.
- 13. Harish Chander; "Cyber Laws and IT Protection", PHI Learning Pvt. Ltd, 2012.

# JOURNAL AND SPECIAL ACTS REFERENCES

- 1. The Copyright Act, 1957
- 2. The Patent Act, 1970
- 3. The Indian Evidence Act, 1872

# DIGITAL REFERENCES

- 1. https://mrcet.com/pdf/Lab%20Manuals/IT/R15A0533%20CF.pdf.
- 2. https://annamalaiuniversity.ac.in/studport/download/engg/it/resources/Cyber%20Forensics.pdf
- 3. https://www.ifsedu.in/cyber-forensics-cyber-crimes-cyber-security-cyber-law/
- 4. https://lawbhoomi.com/cyber-law-notes/

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

Formative Assessment 40 (Weightage in Marks includes: Written Tests, Activities/Assignment/Seminar/Presentation &Attendance)				
Assessment Occasion/type	C1	C2	<b>Total Marks</b>	
Written Test (2)	10	10	20	
Seminar/Presentation/	10		10	
Activity				
Case work/Assignment/Field work/Project		10	10	
work etc				
Total	20	20	40	

Date

Course Co-ordinator