

**Model Curriculum**  
**B.A/B.Sc**  
**Criminology and Forensic Science**

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

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

### **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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## Model Program Structures for the Under-Graduate Programs

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

Sem	Discipline Core (DSC) (Credits) (L+T+P)	Discipline Elective(DSE) / Open Elective (OE) (Credits) (L+T+P)	Ability Enhancement Compulsory Courses (AECC), Languages (Credits) (L+T+P)		Skill Enhancement Courses (SEC)			Total Credits
					Skill based (Credits) (L+T+P)	Value based (Credits) (L+T+P)		
III	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
IV	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

# **Model Curriculum III and IV Semester**

**B.A /B.Sc. CRIMINOLOGY AND FORENSIC SCIENCE**

## **Syllabus**

**Name of the Degree Program:** B.A/B.Sc Criminology and Forensic Science

**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 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.	Discipline Core(DSC)	(Credits) (L+T+P)	Open Elective (OE)	(Credits) (L+T+P)	Skill Enhancement Courses (SEC)			
					Skill based	(Credits) (L+T+P)	Value based	(Credits) (L+T+P)
I	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		
II	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
<b>Theory</b>	40	60
<b>Practical</b>	25	25
<b>Projects</b>	40	60
<b>Experiencing Learning (Internship/Field Work Placements)</b>	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.

Semester	Name of the course	What all program outcomes the course addresses(not exceeding three per course)	Pre requisite course(s)	Concurrent course#	Pedagogy##	Assessment \$
1	Police Science and Criminal Investigation (4=2)	<p>1. A systematic disciplinary knowledge of the fundamental concepts of Police Science, analytical reasoning, and Criminal investigation</p> <p>2. Apply appropriate methodologies in order to conduct analytical skills and detect patterns of crime, establishing linkage between scene of crime, criminal and victims of crime.</p> <p>3, Apply moral and ethical awareness/reasoning in detection crime and pertinent physical clues and evidences.</p>	NIL	NIL	<p>i. Lecture Method</p> <p>ii. Interactive Sessions</p> <p>iii. Activities (Seminar and Assignments, Outdoor learnings, Individual &amp; Group presentation)</p> <p>iv. ICT Based (Video-Audio (virtual) Mode and Power Point Presentation</p>	<p>i. Semester End Examination (Written) for 60 Marks</p> <p>ii. Internal Assessment for 40 Marks including (two written tests, Seminar, assignment/attendance)</p>
1						
2	Correctional Administration (4+2)	<p>1. A systematic understanding of the fundamental concepts, administration of Prison as correctional institutions, reformation and rehabilitation of inmates as good citizens,</p> <p>2. Apply appropriate knowledge with reflective thinking and to critical examine the conditions of jails.</p> <p>3, Apply relevant knowledge and analytical reasoning for the improvements and suggestions.</p>			<p>i. Lecture Method</p> <p>ii. Interactive Sessions</p> <p>iii. Activities (Seminar and Assignments, Outdoor learnings, Individual &amp; Group presentation)</p> <p>iv. ICT Based (Video-Audio (virtual) Mode and Power Point Presentation</p>	<p>i. Semester End Examination (Written) for 60 Marks</p> <p>ii. Internal Assessment for 40 Marks including (two written tests, Seminar, assignment/attendance)</p>
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-4.1 Child 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	X	X	X	X	X	X	
2. Skilled communicator	X	X	X	X	X	X	X
3. Critical thinker and problem solver	X	X	X	X	X	X	X
4. Team player/worker	X	X	X	X	X	X	X
5. Skilled project manager	X	X	X	X	X	X	X
6. Digitally literate		X		X		X	X
7. Analytical reasoning	X	X	X	X	X	X	X
8. Research-related skills	X	X	X	X	X	X	X
9. Multicultural competence	X	X	X	X	X	X	X
10. Moral, Ethical & Legal reasoning	X	X	X	X	X	X	X
11. Develop scientific temper and self-motivating learnings	X	X	X	X	X	X	X
12. Lifelong learner		X	X	X	X	X	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 Credits	Number of Lecture hours/semester	Number of Practical credits	Number of practical hours/semester
4	60	4	60
<b>Content of Theory course</b>			<b>60hrs</b>
<b>Unit – 1 Introduction to Police Science</b>			<b>15</b>
Chapter-1 Police administration in India <ul style="list-style-type: none"><li>• Role of Police in Independent India, Constitutional provisions regarding policing in India</li><li>• Role of Police in International level</li></ul> Chapter-2 Policing in present scenario. <ul style="list-style-type: none"><li>• Introduction to various styles of Policing</li><li>• Ethics in Policing</li><li>• Technology and policing</li><li>• Short comings of policing</li><li>• Police recruitment, training and Police Reforms</li><li>• Policing in present scenario</li></ul>			
<b>Unit – 2 Powers, Duties and challenges of Police</b>			<b>15</b>
Chapter-3 Powers and duties <ul style="list-style-type: none"><li>• Executive powers and duties of police officers in the investigation</li><li>• Police accountability in India: Courts, Executive Magistrates ,State Government, CAO, Citizens/ Community, Programmes for redressing Public grievances, Police Complaints Authorities</li></ul> Chapter-4 Challenges in policing <ul style="list-style-type: none"><li>• Internal and external challenges in policing</li><li>• Police Image, Police Corruption, Police and Human Rights</li><li>• Technological short comings and policing</li></ul>			
<b>Unit – 3 Criminal Investigation</b>			<b>15</b>
Chapter-5Basics of Investigation <ul style="list-style-type: none"><li>• Objectives of Criminal Investigation</li><li>• Characteristics and role of Investigating officer</li></ul> Chapter-6 Legal procedures in Investigation <ul style="list-style-type: none"><li>• Investigation procedures in traditional, contemporary and special crimes</li><li>• Case Laws on Registration of FIR, charge sheet, recording of statements, arrest, confession, summons and warrants.</li></ul>			
<b>Unit -4 Crime scene Investigation</b>			<b>15</b>
Chapter -7 Crime scene Management <ul style="list-style-type: none"><li>• Responsibilities of First responding officer.</li></ul>			

<ul style="list-style-type: none"> <li>• Crime scene – Types, search methods, photography and sketching.</li> </ul> <p>Chapter-8 Physical Clues</p> <ul style="list-style-type: none"> <li>• Types of physical clues and various crime scenes</li> <li>• Procedures in locating, handling, collecting, packing and forwarding of physical clues</li> </ul>	
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**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\\_THE\\_POLICE\\_OR\\_SCIENCE\\_FOR\\_THE\\_POLICE\\_-\\_CONCEPTUAL\\_CLARIFICATION\\_AND\\_TAXONOMY\\_FOR\\_COMPARING\\_POLICE\\_SYSTEMS](https://www.researchgate.net/publication/318324772_POLICE_SCIENCE_SCIENCE_OF_THE_POLICE_OR_SCIENCE_FOR_THE_POLICE_-_CONCEPTUAL_CLARIFICATION_AND_TAXONOMY_FOR_COMPARING_POLICE_SYSTEMS)
2. <https://www.ojp.gov/pdffiles1/nij/228922.pdf>  
[https://www.researchgate.net/publication/340874515\\_Police\\_science\\_as\\_an\\_emerging\\_scientific\\_discipline](https://www.researchgate.net/publication/340874515_Police_science_as_an_emerging_scientific_discipline).

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

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

Date

Course Co-ordinator

Subject Committee Chairperson

## **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 Credits	Number of Lecture hours/semester	Number of Practical credits	Number of practical hours/semester
<b>03</b>	<b>45</b>	---	---
<b>Content of Theory course</b>			<b>45 hrs</b>
<b>Unit – 1 Gender Equality</b>			<b>15</b>
Chapter-1 Gender awareness in Criminology <ul style="list-style-type: none"> <li>• Gender and crime: Meaning, nature and scope</li> <li>• Gender awareness in Criminology</li> </ul> Chapter-2 Gender gap in crime <ul style="list-style-type: none"> <li>• Gender equality: Meaning, definition</li> <li>• Gender equality and Crime</li> <li>• Cognitive capacities and crime</li> <li>• Situational pressures and gender</li> </ul>			
<b>Unit – 2 Gender specific crimes and Criminological studies</b>			<b>15</b>
Chapter-4 Criminological theories of gender and crime Chapter-4 Gender in Criminal Justice System <ul style="list-style-type: none"> <li>• Crimes and Cultural Views</li> <li>• Legal system</li> <li>• Police practice</li> <li>• Court trials</li> </ul> Chapter-5 Patterns of Crime <ul style="list-style-type: none"> <li>• Meaning, definition and nature</li> <li>• Gendered pathways to offending</li> </ul> Chapter-6 Women and Crime, Men and Crimes <ul style="list-style-type: none"> <li>• Female patterns of offending</li> <li>• Rising female criminality</li> <li>• Male patterns of offending</li> </ul> Reasons for male criminality			
<b>Unit -3 Crimes against gender specific children</b>			<b>15</b>
Chapter-7 Crimes against children <ul style="list-style-type: none"> <li>• Meaning, Definition, Nature and Scope</li> <li>• Harmful cycle of gender-based violence on children</li> <li>• Causes and impacts of gender-based violence against children</li> </ul> Chapter-8 Types of Crimes against Children <ul style="list-style-type: none"> <li>• Infanticides and feticides</li> <li>• Child trafficking</li> <li>• Child pornography</li> <li>• Labour and street offences, etc</li> <li>• Various procedural rules for protection of children</li> </ul>			

## SUGGESTED READINGS:

1. Fitz-Gibbon, K. & Walklate, S. (2018). Gender, Crime and Criminal Justice, Routledge, ISBN: 9781138660376
2. Mukharjee, S. K. & Scutt, J. A. (1981). Women and Crime, Routledge, ISBN: 9781138186609
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. [Gender-Based Violence: A Global Threat | Save the Children](#)
2. <https://www.open.edu/openlearncreate/mod/oucontent/view.php?id=53771&printable=1>
3. [\(PDF\) Gender and Crime: Toward a Gendered Theory of Female Offending \(researchgate.net\)](#)
4. <https://ijcst.journals.yorku.ca/index.php/ijcst/article/download/39737/35977>
5. [Gender and Theories of Delinquency - Oxford Handbooks](#)

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

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

Date

Course Co-ordinator

Subject Committee Chairperson

## Semester-III

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

#### Title of the course: OE-3.2 Crime 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 Credits	Number of Lecture hours/semester	Number of Practical credits	Number of practical hours/semester
03	45	---	---
<b>Content of Theory course</b>			<b>45 hrs</b>
<b>Unit – 1 Crime Scene Preliminaries</b>			<b>15</b>
Chapter-1 Crime Scene and its importance. <ul style="list-style-type: none"> <li>• Meaning and Types of crime scenes</li> <li>• indoor and outdoor Mobile</li> <li>• primary secondary and tertiary.</li> </ul> Chapter-2 Securing and isolating the crime scene. <ul style="list-style-type: none"> <li>• Crime scene search methods.</li> <li>• Safety measures at crime scenes.</li> <li>• Legal considerations at crime scenes.</li> </ul>			
<b>Unit – 2 Crime Scene Documentation</b>			<b>15</b>
Chapter-3 Crime Scene Documentation and its importance <ul style="list-style-type: none"> <li>• Types of documentation of crime scenes</li> <li>• Photography.</li> <li>• Videography,</li> <li>• Sketching and</li> <li>• Recording notes.</li> </ul> Chapter-4 Duties of first responders at crime scenes. <ul style="list-style-type: none"> <li>• Coordination between police personnel and forensic scientists at crime scenes.</li> <li>• The evaluation of 5Ws (who?, what?, when?, where?, why?) and 1H (how?).</li> </ul>			
<b>Unit -3 Crime Scene Evidence Management.</b>			<b>15</b>
Chapter-5 Classification of crime scene evidence <ul style="list-style-type: none"> <li>• Locard principle and Importance.</li> <li>• Physical evidence and</li> <li>• Trace evidence.</li> </ul> Chapter- 6 Collection, labelling, sealing of evidence. <ul style="list-style-type: none"> <li>• Hazardous evidence.</li> <li>• Preservation of evidence.</li> <li>• Chain of custody.</li> <li>• Reconstruction of crime scene.</li> </ul>			

## 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

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

Date

Course Co-ordinator

Subject Committee Chairperson

**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.**

<b>Number of Theory Credits</b>	<b>Number of lecture hours/semester</b>	<b>Number of practical Credits</b>	<b>Number of practical hours/semester</b>
<b>2</b>	<b>30</b>	-----	-----

<b>ContentofTheoryCourse1</b>	<b>30 Hrs</b>
<b>Unit-I: Introduction to Artificial Intelligence</b>	15
<b>Chapter 1: Artificial Intelligence:</b> <ul style="list-style-type: none"> <li>• <b>Concept, Meaning and Definition</b></li> <li>• <b>Development of IA and its importance</b></li> <li>• <b>Application of IA in Intelligence</b></li> </ul> <b>Chapter 2: Artificial Intelligence in Crime investigation and Criminal Justice System</b> <ul style="list-style-type: none"> <li>• <b>Prevention of Crime through AI</b></li> <li>• <b>Detection f Crime through AI</b></li> <li>• <b>Application of AI in CJS</b></li> </ul>	
<b>Unit-II: Introduction to Tools of AI in Policing</b>	15
<b>Chapter-3 Surveillance System: Meaning and its importance in Policing</b> <ul style="list-style-type: none"> <li>• <b>CCTVs as a tool of AI</b></li> <li>• <b>Cameras as a tool of AI</b></li> <li>• <b>FRS as a tool of AI</b></li> <li>• <b>GPS &amp; GIS as tool of AI</b></li> </ul> <b>Chapter 4: Access Control System and IA</b> <ul style="list-style-type: none"> <li>• <b>AI Barriers</b></li> <li>• <b>Biometric System</b></li> <li>• <b>Access Card</b></li> </ul>	



**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. [https://www.researchgate.net/publication/331099286\\_Artificial\\_Intelligence\\_Crime\\_An\\_Interdisciplinary\\_Analysis\\_of\\_Foreseeable\\_Threats\\_and\\_Solutions](https://www.researchgate.net/publication/331099286_Artificial_Intelligence_Crime_An_Interdisciplinary_Analysis_of_Foreseeable_Threats_and_Solutions)
2. <https://www.researchgate.net>

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

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

Date

Course Co-ordinator

Subject Committee Chairperson

**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.

<b>Number of Theory Credits</b>	<b>Number of Lecture hours/semester</b>	<b>Number of Practical credits</b>	<b>Number of practical hours/semester</b>
<b>04</b>	<b>60</b>	<b>02</b>	<b>60</b>
<b>Content of Theory course</b>			<b>60hrs</b>
<b>Unit – 1 Introduction to Correctional Administration</b>			<b>15</b>
Chapter-1 Penology and correctional administration <ul style="list-style-type: none"> <li>• Penology – Definition, nature and scope</li> <li>• Correction – Definition, nature and scope</li> <li>• Types of punishment.</li> <li>• Similarities and Differences between punishment and correction</li> </ul> Chapter-2 Theories of Punishment <ul style="list-style-type: none"> <li>• Deterrence theory</li> <li>• Retributive theory</li> <li>• Preventive theory</li> <li>• Reformation theory</li> </ul>			
<b>Unit – 2 Prison system</b>			<b>15</b>
Chapter-3 Prison and prison organization <ul style="list-style-type: none"> <li>• Historical development of prison system.</li> <li>• Objectives of Imprisonment</li> <li>• Types of prisons and correctional institutions in India.</li> <li>• Modernization of Prisons in India; Reformation &amp; Rehabilitation approach in Prisons.</li> </ul> Chapter-4 Prison reforms in India <ul style="list-style-type: none"> <li>• History and evolution of prison legislations in India.</li> <li>• Recommendation of different committees on reformation system.</li> <li>• Prison act and prison manual</li> </ul>			
<b>Unit – 3 Institutionalized treatment</b>			<b>15</b>
Chapter-5 Corrections through Institutionalized treatment <ul style="list-style-type: none"> <li>• Meaning and purpose</li> <li>• Types of institutions: Adult, women and children</li> <li>• Facilities provided in institutions.</li> <li>• Remission, temporary release and premature release</li> </ul> Chapter-6 Legal provisions of prisoners <ul style="list-style-type: none"> <li>• Legal Rights of prisoners</li> <li>• Constitutional provisions of prisoners</li> <li>• Nelson Mandela rules for the treatment of prisoners</li> </ul>			

<b>Unit -4 Non Institutionalized treatment for prisoners</b>	<b>15</b>
Chapter -7 Community based corrections <ul style="list-style-type: none"> <li>• Probation: Concept, history and scope</li> <li>• Parole: Concept, history and scope</li> <li>• After care services</li> <li>• Restitution and fine</li> </ul> Chapter-8 Miscellaneous <ul style="list-style-type: none"> <li>• Standard minimum rules for non custodial measures(Tokyo rules)</li> <li>• Role of NGOs in reformation and rehabilitation</li> </ul>	

**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. Paranjpe, 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. <http://kamarajcollege.ac.in/Department/Criminology/II%20Year/003%20Core%205%20-%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](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

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

Date

Course Co-ordinator

Subject Committee Chairperson

## **Semester-IV**

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

**Credits: 02    Marks: 40+10=50**

#### **List of Field Based Practical's 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 Credits	Number of Lecture hours/semester	Number of Practical credits	Number of practical hours/semester
03	45	--	---
<b>Content of Theory course</b>			<b>45hrs</b>
<b>Unit – 1 Introduction to Child, their Protection and Laws</b>			<b>15</b>
Chapter-1 Child: Meaning and Definition <ul style="list-style-type: none"><li>• Legal and constitutional definitions of child</li><li>• Developmental stages of childhood</li><li>• Theories in child development</li></ul> Chapter-2 Factors determining Well Being and Development Of Children <ul style="list-style-type: none"><li>• Adult-child relationships</li><li>• Protection, care and support</li><li>• Factors affecting development and well-being of children</li></ul> Chapter-3 Child Protection <ul style="list-style-type: none"><li>• Meaning, definition, nature and scope</li><li>• Role of family, school, society, NGOS and government in child protection.</li></ul> Chapter-4 Legislations, Policies and Programmes <ul style="list-style-type: none"><li>• Constitutional provisions for children</li><li>• UNCRC, other relevant conventions and</li><li>• National policies in child protection</li></ul>			
<b>Unit – 2 Juvenile Justice System</b>			<b>15</b>
Chapter-5 Juvenile Justice act <ul style="list-style-type: none"><li>• Salient features of JJ act</li><li>• Procedures while dealing with children in conflict with law</li><li>• Procedures while dealing with children in need care and protection</li></ul> Chapter-6 Commissions for Protection Of Child Rights Act 2005 <ul style="list-style-type: none"><li>• Role, functions and powers of national commission and state commissions in protection of child rights</li><li>• Salient features of integrated child protection scheme</li></ul>			

<b>Unit -3 Crimes against children</b>	<b>15</b>
<p>Chapter -7 Crimes against children</p> <ul style="list-style-type: none"> <li>• Crimes against children in family, schools and public places</li> <li>• Child labour and street offences</li> <li>• Child trafficking, prostitution and pornography etc</li> </ul> <p>Chapter-8 Special Laws for Crimes Against Children</p> <ul style="list-style-type: none"> <li>• Prohibition of child marriage act</li> <li>• Protection of children from sexual offences</li> <li>• Child labour (prohibition and prevention) act</li> <li>• United Nations Standard Minimum Rules for Juvenile Justice (Beijing rules)</li> <li>• UN Riyadh Guidelines etc.</li> </ul>	

### **SUGGESTED READINGS:**

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

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

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

Date

Course Co-ordinator

Subject Committee Chairperson

## 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 Credits	Number of Lecture hours/semester	Number of Practical credits	Number of practical hours/semester
03	45		
<b>Content of Theory course</b>			<b>45hrs</b>
<b>Unit – 1 Introduction to Computer and networking</b>			<b>15</b>
Chapter-1 Fundamentals of Computers and operating system <ul style="list-style-type: none"><li>• Computers &amp; Networking – Basics of computers, its Definitions and classification</li><li>• Operating systems- Operating system and Function, Batch, Interactive, Time-sharing and Real-Time systems, CPU Scheduling – Scheduling concept, algorithms and Performance criteria, memory management. File sharing, File System Implementation. Overview of Linux Operating System.</li></ul> Chapter-2 Basics of Networking <ul style="list-style-type: none"><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>			
<b>Unit – 2 Cyber-crime, cyber security &amp; Cyber Forensics</b>			<b>15</b>
Chapter-3 Cyber Crime <ul style="list-style-type: none"><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>			



<p>Chapter-4 Cyber Security</p> <ul style="list-style-type: none"> <li>• Risk evaluation – Identification of Threats, Vulnerabilities and Risk.</li> <li>• Risk Management, Risk Assessment and Analysis.</li> <li>• Information Classification, Policies, Standards, Procedure and Guidelines.</li> <li>• Security Frameworks, Layers of Security.</li> <li>• Authorization and Access Controls- Models, Methods and Types of Access Control.</li> </ul> <p>Chapter-5 Digital Forensics: Meaning, Importance and Tools</p> <ul style="list-style-type: none"> <li>• Types of Computer Forensics Tools and its needs</li> <li>• Computer Forensics Software Tools.</li> <li>• UNIX/Linux Forensics Tools, Other GUI Forensics Tools, Computer Forensics Hardware Tools, Forensic Workstations</li> </ul>	
<b>Unit -3 IT Act and other Laws for Cyber-crime</b>	<b>15</b>
<p>Chapter-6 IT Act 2000</p> <ul style="list-style-type: none"> <li>• Objectives, Applicability, Non-applicability, Definitions, Amendments and Limitations.</li> <li>• 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.</li> </ul> <p>Chapter-7 Indian Evidence Act</p> <ul style="list-style-type: none"> <li>• Classification – civil, criminal cases. Essential elements of criminal law</li> <li>• Cross examination and re-examination of witnesses.</li> <li>• Sections 32, 45, 46, 47, 57, 58, 60, 73, 135, 136, 137, 138, 151. Section 293 in the code of criminal procedure. Secondary Evidence Section 65-B.</li> </ul>	

### 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

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

Date

Course Co-ordinator

Subject Committee Chairperson

