



UNIVERSITY OF CALICUT

Abstract

Master of Arts (Criminology and Police Science) Programme CUCBCSS UG-Syllabus with effect from 2018 admission onwards-Approved- Implemented- Orders issued.

G & A - IV - B

U.O.No. 11867/2017/Admn

Dated, Calicut University.P.O, 22.09.2017

- Read:-*1) Minutes of the BoS Dated 06.07.17.
2) Minutes of the Faculty of Humanities Dated: 12.07.2017
3) Minutes of the Academic Council Dated 17.07.2017.
4) Orders of the Vice Chancellor in File of even no. Dated 07.08.2017

ORDER

Vide paper read as first above, the Syllabus of the Master of Arts (Criminology and Police Science) Programme finalised and approved by the Board of Studies in Criminology with effect from 2018 admission onwards.

Vide paper read as second above, the Faculty of Humanities approved the syllabus of the Master of Arts (Criminology and Police Science) Programme as approved by the Board of Studies in Criminology.

Vide paper read as third above, the Academic Council held on 17-07-2017 resolved to approve the Minutes of the Meeting of the Faculty of Humanities alongwith the Boards of Studies coming under the Faculty.

Vide paper read as fourth above, sanction has been accorded by the Vice Chancellor to implement the resolutions of the Academic Council.

Sanction has, therefore, been accorded to implement the Syllabus of the Master of Arts (Criminology and Police Science) Programme with effect from 2018 admission onwards.

Orders are issued accordingly.
(Syllabus appended).

Ajitha P.P

Joint Registrar

To

The Principals of all affiliated colleges.

Copy to:

Copy to: PA to CE/EX IV section/EG section/JCE V/DR PG Branch/Director
SDE/SDE Exam Wing/System Administrator with a request to upload the syllabus in the
University website/GA I F section/Library/Enquiry/SF/DF/FC/

Forwarded / By Order

Section Officer

GUIDELINES FOR THE IMPLEMENTATION OF THE SYLLABUS IN M.A.CRIMINOLOGY AND POLICE SCIENCE

(w.e.f. 2018 Admission)

Title

The title of the Course shall be “Master of Arts in Criminology and Police Science”.

Objective

The aim of the course is to impart knowledge and develop skills relating to application of criminological and penological thoughts and police administration in the administration of criminal justice system.

Duration

The duration of the course shall be two years, spread in four semesters.

Eligibility

Graduate in Criminology, forensic science, psychology, social work, sociology and law of any recognized University with 50% marks for general category and minimum 45% marks for SC/ST shall be eligible for admission in the course.

Admission

Admission shall be based on entrance test by Directorate of admissions of the University (including reservation of seats).

Course contents

Students in the M.A. programme are required to take 16 courses of 4 credits each + project work and viva voce over a four semester period. There are 12 core courses and 4 elective courses. Beside the core courses, the students have to select 4 elective courses, 1 in second and third semesters and 2 in fourth semesters. The credit requirement for award of M.A. Degree as prescribed by the University regulations is 72.

Minimum credit required for pass

Core course (Other than project/dissertation)	48
Elective courses	16
Project/dissertation/viva voce	8

Assessment

The total score of a course is 100 and is apportioned in the ratio 20:80 between Continuous Evaluation (CE) and End Semester Examination (ESE). CE consists of four components. Attendance : 3%, mid semester examination : 8%, seminar : 5% and a viva voce : 4%. In the matter of attendance 75% is compulsory for appearing the end semester examination.

Mid semester examination (30 minutes duration) is in the form of short essay question, in which two out of four questions are to be answered, each in about 150 words. Each student has also to make a seminar presentation for about 20 minutes on a topic assigned by the teacher. For each course, there is Viva Voce at the end of the semester. End semester examination (3 hour duration) consists of three types of questions – short answer questions (30 marks) in which the candidate has to answer any 6 questions out of 8, each in about 200 words and essay questions (30 marks) in which two questions need to be answered out of four each in about 500 words and very short answer questions (20 marks) in which the candidate has to answer 10 questions out of fourteen in about 75 words.

**COURSES OFFERED FOR CRIMINOLOGY AND POLICE SCIENCE UNDER
CHOICE BASED CREDIT SEMESTER SYSTEM (CCSS)**

w.e.f 2018 ADMISSIONS

Semester I

Course Code	Title	Type	Credits
CP1CO1	Introduction to Crime and Criminology	Core	4
CP1CO2	Introduction to Police Science and Police Administration	Core	4
CP1CO3	Police Science and Crime investigation	Core	4
CP1CO4	Methodology of Research	Core	4

Semester II

Course Code	Title	Type	Credits
CP2CO5	Forensic Science and Forensic Medicine	Core	4
CP2CO6	Applied Criminology and Criminal Profiling	Core	4
CP2CO7	Statistics in Criminology	Core	4
CP2EL1	Elective – I	Elective	4

Semester III

Course Code	Title	Type	Credits
CP3CO8	Criminal Laws, Evidence and Procedure	Core	4
CP3CO9	Crime against women and children	Core	4
CP3CO10	Police interrogation forensics	Core	4
CP3EL2	Elective – 2	Elective	4

Semester IV

Course Code	Title	Type	Credits
CP4CO11	Criminal Psychology: Theory and Practice	Core	2
CP4CO12	Criminal Psychology: Practicals		2
CP4CO13	Penology , Correctional Administration & Offender Rehabilitation	Core	4
CP4EL14	Elective-3	Elective	4
CP4EL15	Elective-4	Elective	4
	Dissertation /Project/Viva Voce		8

Elective Courses Offered

1. Cyber Crime and Laws
2. Forensic Clinical Psychology
3. Disaster Management
4. Environmental Crimes and Laws
5. Digital Forensic
6. New age crimes

PRACTICUM/INTERNSHIP

Students are expected to visit any four organization that apply criminology in practice, one week each in courts, jail, rehabilitation centers, juvenile homes, destitute, etc. during semester vacation, and should submit a report duly signed by concerned authority.

CP1C01: Introduction to Crime and Criminology

Unit I: Introduction to crime

Concept of Crime, Nature of crime, Definition of Crime –Social, Psychological and legal Approaches, Crime in ancient, medieval and modern society, Crime in modern society, Casual factors of crime.

Unit II: Introduction to Criminology

Definition of Criminology, Nature and scope of Criminology, Relation with other social sciences, Relevance of criminology to contemporary society. Schools of Criminology- Pre-classical, Classical, Neo-Classical, Positive, Cartographic, Biological and Constitutional Schools. Theories of Criminology- Sociological Theories- Differential Association theory, Group Conflict Theory, Containment Theory, Subculture Theory, Labeling Theory.

Unit III: Psychological Theories of personality

Freud, Murray and Catell. Theories of learning - Pavlov, Skinner, Thorndike, Kohler and Bandura Theories of Motivation - Maslow, Hersberg, Atkinson and McClelland.

Unit IV: Criminal Justice System & Crime Trends in India

Structure of Criminal Justice System in India; Roles of legislature, police, judiciary and prison system in Criminal Justice; Cooperation and coordination among the various sub systems of criminal justice system. Crime in India: Statistics, Crime Clock, Crime rate, National Crime records Bureau, State Crime records Bureau, and District crime records bureau; Crime patterns and Trends in India (latest trends should be introduced).

Unit V: Crime Prevention

Crime and sense of security, Social control and crime prevention, Community and crime prevention, Contemporary crime prevention strategies.

Recommended readings:

1. Brendan Maguire & Polly F. Radosh, (1999), *Introduction to Criminology*, Wadsworth Publishing Company, Boston, U.S.A.
2. Reid Sue Titus, (2006). *Crime and Criminology*. Mc Graw Hill Publishers.
3. Edwin H. Sutherland and Donald R. Cressey (1974), *Principles of Criminology*, Lippincott, Philadelphia.
4. Williams, F.P. and McShane, M.D. (2004) *Criminological Theory*. Upper Saddle River, NJ: Prentice Hall.
5. John E. Conklin, J.E., (1981), *Criminology*, Macmillan, London.

CP1C02: Introduction to Police Science and Police Administration

Unit I: History of Police

History of Police in medieval India, Role of Police in Modern India, Kerala Police Act.

Unit II: Organizational Structure of Police

State and Reserve Police, Working of Police Station , Crime Records of State and National Levels, Police Reforms, INTERPOL.

Unit III: Recruitment and Training

Police Act of 1861, Reforms of National Police Commission, Police Commissions (KERALA), Police Establishment Board.

Unit IV: Police Investigation

F.I.R, Case Diary, Charge sheet and Final Report; Powers and Duties of Police Officers, Indoor and Outdoor scene of Crime, Collection of Evidence with Experts report, Handling and Packing of different Physical Clues, Investigation of Crimes – Theft, Murder, Rape and House breaking.

Unit V: Courts in India

Courts – JMFC, Magistrate Courts , Traffic Courts, District courts ; Police Public Relation ; Community Policing, . Programmes for Redressal of public Grievance, Working of High Courts and Supreme Court.

Recommended readings:

1. Diaz, S.M., (1976), *New Dimensions to the Police Role and Functions in India*, Published by the National Police Academy, Hyderabad.
2. Krishna Mohan Mathur, (1994), *Indian Police, Role and Challenges*, Gyan Publishing House, New Delhi.
3. Morley, W.H., (1958), *Administration of Justice in India*, New Delhi, Metropolitan.
4. Nehad Ashraf, (1992), *Police and Policing in India*, Common Wealth Publishers, New Delhi.
5. Rosenbaum, Dennis P., Arthur J. Lurigio, and Robert C. Davis (1998). *The Prevention of Crime: Social and Situational Strategies*. Wadsworth Publishing. Belmont CA.

CP1C03: Police Science and Crime Investigation

Unit I: Police Science

Scientific Questioning of the informant and Drafting of a F.I.R, Preparation of an Inquest Report, Writing a Mahazar, Recording a Witness Statement, Physical evidence from the scene of crime: **i.e.**, Labeling, Ingredients of a label, Sealing of Exhibits, Formalities to be observed when transporting exhibits to experts, Forwarding note with narration nature of crime examination required and list of exhibits and specimen seal.

Unit II: Crime Investigation

Protecting a scene of crime and photographing— **i.e.**, Bird's Eye View, general, medium, close up and very close up photographs. Sketching a scene of crime— **i.e.**, Rough and Sketch on Scale with graphic symbols [or legends] and scientific ways of measuring at the scene of crime. Inspection of a Scene of Crime— **i.e.**, Spiral method, Strip method, Double Strip method and Wheel or Pie method. Markings on each item of evidence from the scene of crime for identification purpose: (1) Abrasives (2) Acids (3) Adhesive tapes (4) Alkalis (5) Ammunition (6) Anonymous letters and other letters/ papers. (1) Blood (2) Bullets (3) Catridges (4) Catridge cases. (1) Partly charred or Burned Papers (2) Cheques (3) Clothing (4) Plastic Sheets. (1) Drugs (2) Liquids (3) Powders, Pills and solids. (1) Fibres (2) Fire-arms (3) Gasoline (4) Glass fragments (5) Glass particles. (1) Hair (2) Matches (3) Medicines (4) Oil (5) Organs of body. (1) Paint (2) Chips or scrapings (3) Plaster of paris castes (4) Shoe-print lifts (5) Tools (6) Tool marks (7) Urine or water.

Unit III: Handling and packing of physical evidence from the scene of crime

(1)Ammunition etc. Unfired cartridges (2) Discharged bullets (3) Bullets from dead bodies (4) Bullets found in furniture, wall, wood, floor or earth (5) Shot gun shells (6) Pellets (7) Wadding (8) Discharged residues (9) Bullet holes (10) Burnt bullet and cartridge cases (11) Clothes (12) Tissues surrounding gun-shot injuries (13) Fire arms.

Hair, Fibre, Blood etc. (I) Human hair (2) Animal Hair (3) Hair adhering to objects with blood, semen etc. (4) Fibre (5) Blood - fresh moist stains on clothing, sheets and blankets (6) Blood in large quantities (7) Liquid blood (8) Dried blood stains on clothing, sheets, solid objects, dried leaves etc. (9) Blood stains in nails (10) Blood in hair (II) Blood on the body of a person (12) Blood on grass (13) Blood in toxicological cases.

Semen, Saliva, Urine etc. (I) Semen: Fresh moist seminal stains (2) Dried seminal stains (3) Vaginal specimen (4) Semen from vagina, rectum or oral cavity (5) Saliva: on stamps, clothes, pillow covers, bed sheets, dead persons, living persons (6) Urine from living person/dead persons (7) Stomach washing (8) Human feces (9) Insects (10) Tissue (II) Skeletal remains and teeth (12) Viscera.

Tool, tool marks etc.- (1) Tool and tool marks (2) Tool mark casts

Glass particles etc.- (1) Glass particles (2) Poultry, cattle feeds, saw dust and powdered drugs (3) Paint, paint chips (4) Tablets, capsules (5) Explosive residues (6) Greases and lubricants (7) Dust on clothes (8) Liquids (9) Occupational dust Finger prints, foot prints etc. (1) Finger prints (2) Semi-sunken foot print casts (3) Documents: Partly charred documents, fragile documents, torn documents, request documents computer print outs.

Unit IV: Preparation of the Final Report to the court

Unit V: Role play

Examinations and cross examinations of : (1) Eye Witness, (2) Expert witness (3) Police witness

Recommended readings:

1. Gross, Hans and Adolf Gustav, *Criminal Investigation*, Sweet and Maxwell, London, 1924.
2. Kirk, P.L., *Crime Investigation*, Interscience Publisher, New York, 1953
3. Charles O'hara, *Fundamentals of Criminal Investigation*, Charles C. Thomas, Springfield, 1956
4. Harry Soderman, *Modern Criminal Investigation*, American Elsevier, New York, 1965
5. William Deinstein, *Techniques for the Crime Investigator*, Springfield, Illinois, 1974

6. International Association of Chiefs of Police, *Criminal Investigation*, LA.C.P., Washington, D.C. 1971
7. Scott, James, D., *Investigative Methods*, Reston Publishing Company, Inc., Reston, Virginia, 1978
8. Sharma B.R., *Forensic Science in Criminal Investigation and Trials*, Universal Law Publishing Co. Pvt. Ltd., Delhi, 2013.

CP1C04: Methodology of Research

Unit I: Introduction to Research Methodology

Importance of Research in Criminology and forensic science, Defining and selection of Research Problem and Formulation of Hypothesis and research questions.

Unit II: Research designs

Meaning, nature and Features, Types of research designs, Experimental Designs-nature and types, Sampling and Sampling Designs.

Unit III: Data Collection and Measurement

Methods and Techniques of Data Collection-Primary and secondary, Scales of measurements, Attitude Measurement and Scales.

Unit IV: Data Presentation and Analysis

Data Processing, Statistical Analysis-Parametric and non parametric & Interpretation of Data.

Unit V: Report Writing and Presentation

Significance, Steps in writing report, Lay out of the research report, Types of reports.

Recommended readings:

1. C R Kothari. (2015). *Research methodology methods and techniques*. New Delhi. New Age publishing.

2. David Gadd, Susanne Karstedt & Steven F Messner (2012). *Handbook of Criminological Research Methods*: SAGE Publications Ltd.
3. Krishnaswami O.R. (1993) *Methodology of Research in Social Sciences*, Himalaya Publishing House, Bombay.
4. Nie, Normal H., et al. (1975) *Statistical Packages for the Social Sciences*, New York, McGraw Hill.
5. Wilkinson and Bhandarkar (1993). *Methodology and Techniques in Social Research*, Himalaya Publishing House, Bombay.

CP2C05: Forensic Science and Forensic Medicine

Unit I: Introduction

Definition and History of Forensic Science, Basic Principles of Forensic Science, Anthropometry and portrait Parle, FSL and other expert institutions, Organization and functions of FSL.

Unit II: Forensic Biology, Serology and Psychology

Importance of body fluids- blood saliva and semen in crime investigation, Skull superimposition, Importance of Hairs. Fibres and plant parts in crime investigation, An over view of Narcoanalysis, Polygraph and Brain Mapping

Unit III: Forensic Chemistry, Physics and Ballistics

An introduction to narcotic drugs, and Poisons, Explosives – definition and classification. Common IEDs, Difference between arson and fire, Ballistics- types of fire arms rifled and smooth bored weapons, Identification of shooter, range calculations. Fire arms clues and their significance in investigation. Accident investigation – importance of soil, glass, paint, tyre marks and skid marks in crime investigation.

Unit IV: Cyber Forensics

Cell-phone Forensics, Computer Forensics, Audio Analysis and Forensic speaker identification, Forensic video analysis.

Unit V: Modern Techniques in Forensic Science & Forensic Medicine

DNA Profiling, Importance of touch DNA, Blood stain pattern analysis, Bio metric identification- Foot prints and finger prints, Iris scanning, Lip prints, facial morphology and other personal identification methods, An over view of forensic pathology – Classification of injuries, Exhumation, Different types of autopsies, Forensic odontology and its application in crime investigation.

Recommended readings:

1. Saferstein R., (2001) *Criminalistics: An introduction to Forensic Science*, Prentice Hall, Eaglewood Cliffs, New Jersey, 2001.
2. William G. Eckert., (1997) *Introduction to Forensic Sciences*, CRC press New York.
3. Barry A.J. Fisher., (2000) *Techniques of Crime Scene Investigation*, 6th Edition, CRC Press, New York.
4. Basu S.C., *Handbook of Forensic Medicine and Toxicology*
5. Peter White (Ed.), (1998) *Crime Scene to Court – The essentials of Forensic Science*, The Royal Society of Chemistry, UK.
6. Sharma B.R., *Forensic Science in Criminal Investigation and Trials*, Universal Law Publishing Co. Pvt. Ltd., Delhi, 2013.

CP2C06: Applied criminology and criminal profiling**Unit I: Applied Criminology**

Introduction, Frame work and practice, approaches and applications, impact of criminology on practice.

Unit II: Criminology and Policy

Criminology and Social policy, Criminology and Public Policy / Legal Policy, Criminology and criminal justice system.

Unit III: Application of criminology in various organizations and institutions

Government institutions such as Police, Correctional Institutions (Prison, juvenile home, etc), NGO's, Banking and other financial institutions (Nationalized and Private) etc. Modern Trends in application of criminology.

Unit IV: Criminal Profiling

Introduction, Components and process of criminal profiling, Skill and accuracy of criminal profiling, Geographical Profiling, Procedural considerations and format guide lines. Profiling of various types of criminals- Profiling of Serial Rape offenders, Profiling of Sexual murder offenders, Profiling of Arson offenders, Profiling of Terrorists, Profiling of Extremists (LWE), Profiling of Murderers, Profiling of Dacoits/Robbers, Profiling of White collar / Blue Collar criminals, Profiling of Tech Criminals etc.

Unit V: Riot management and crowd control

Crowds and unlawful assemblies - principles of crowd control - correct police attitudes in dealing with different classes of agitators - counselling and mediation. Procedures to be

followed while dispersing violent crowds- use of tear gas, lathi charge and opening fire. Problems in mobilization of force and command and control. Broad principles of deployment of home Guards, Para military forces and army method of co-ordination and co-operation. Preventive action for maintenance of law and order – patrols, preventive arrests, action under security sections, action against rowdies under IPC. Etc., Collection of intelligence from various sources - collation and dissemination of intelligence. Maintaining peace during elections- security arrangements during elections - security arrangements for Core festivals and fairs.

Recommended readings:

1. Brain Stout, Joe Yates, Brian Williams (2008). *Applied Criminology*, Sage Publishing, Canada.
2. Hugh D. Barlow and Scott H. Decker (2010). *Criminology and public policy: putting theory to work*, Temple University Press, Pennsylvania.
3. Kocsis, Richard N. (2007). *Criminal Profiling: International Theory, Research, and Practice*, Springer.
4. Laurence J. Alison (2005). *The Forensic Psychologist's Casebook: Psychological profiling and criminal investigation*, Willan publishing.
5. A.K.Ghosh - Notes on crowd control.
6. Mihir kumaar Mukherji - Unlawful assembly and rioting.
7. V.V.Singh- Communal violence.

CP2CO7: Statistics in Criminology

Unit I: Research: Nature and Definition

Research: Nature, definition & purposes. Scientific attitudes theory formation: Inductive, Deductive-reasoning. Types of research studies: Descriptive, Analytical, Exploratory and Doctrinal. Quantitative v/s Qualitative research. Basics of Qualitative Research – Ethnography/Observation, Oral History and Grounded Theory. Mixed methods. Criminological Research: Meaning, objective and scope.

Unit-II: Steps in Research

Sources of Research Problems. Primary and Secondary - Independent and dependent variables. Main steps in Social Research types: Formulation of research problem, selecting of problem, study area, etc. Review of Literature. Sample collection, Data Analysis and report writing.

Unit-III: Hypothesis and Sampling

Hypothesis: Definition, types and sources. Research Design: Meaning and types. Reliability and validity. Sampling: Non Probability and Probability types. Methods of data collection: Pilot study, observation, Questionnaire, Interviewing. Case study method. Unobtrusive measures - Secondary data collection – Uses of Official Statistics. Victimization surveys.

Unit-IV: Data Analysis

Types of data: qualitative and quantitative. Analysis and interpretation of data, Data processing. Content analysis. Survey method, measurement and types of scales. Analysis and interpretation of data. Report writing. Ethics in Criminal Justice Research: Researcher Fraud and Plagiarism – Confidentiality in Criminal Justice Research – Avoiding Ethical problems.

Unit-V: Basic Statistics

Statistics-Meaning and significance - Classification of Tabulation, Diagrammatic and graphic representation of data. Measures of central tendency-mean, median and mode. Measures of dispersion-range, mean, quartile and standard deviation. Concept of Statistical inference, test of significance. Analysis of variance. Multivariate analysis - Multiple correlation, meta-analysis, content analysis. Chi-square Test, T-Test and Regression analysis. Use of SPSS for Data Analysis.

Recommended readings:

1. Black, Hubert M., (1972) *Social Statistics*, New York: McGraw-Hill Book Co.
2. Goode W. and P. Hatt (1952) *Methods in Social Research*, NY.
3. Hagan F.E., (1993). *Research Methods in Criminal Justice and Criminology*, Prentice Hall Englewood Cliffs, NJ.
4. Hays, William L., (1973) *Statistics for Social Sciences*, New York: Holt, Rinehart and Winston.
5. Krishnaswami O.R. (1993) *Methodology of Research in Social Sciences*, Himalaya Publishing House, Bombay.
6. Nie, Normal H., et al. (1975) *Statistical Packages for the Social Sciences*, New York, McGraw Hill.
7. Wilkinson and Bhandarkar (1993). *Methodology and Techniques in Social Research*, Himalaya Publishing House, Bombay.

CP3C08: Criminal Laws, Evidence and Procedure

Unit I: Substantive Criminal Law & Procedural Criminal Law

Evolution of civil and criminal liability from common liability for 'wrongs'. Elements of criminal liability: strict criminal liability. Conditions for negating criminal liability (general exceptions). Principles of group or joint liability: Vicarious and corporate liability. Specific offences under the Indian Penal Code. (Homicide, sexual offences, offences against property). Crimes under Protection of Civil Rights Act. Crimes under Dowry Prohibition Act. Crimes under NDPS Act. Crimes under Immoral Traffic Act.

Unit II: Basics of Criminal procedure

Object of Criminal Procedure – Importance of Criminal Procedure – The extent and applicability of the Code of Criminal Procedure, 1973, Territorial divisions –Main segments of the Criminal Procedure – Classification of Offences - Cognizable and Non-Cognizable - Functionaries under the Code – Police, Prosecutors, Defense Counsel, Judges and Prison authorities. Investigation process- Arrest, Search and Seizure, Investigation Interrogation, Identification, Bail, Statements of police. Final Report, Charge – Preventive measures and Security Proceedings. Leading Case Studies.

Unit III: Evidence

Indian Evidence Act – History in India. Evidence – Meaning, principles, and concept of relevancy and admissibility. Confessions and Dying Declaration. Presumption of fact and law, Burden of proof.

Unit IV: Courts and Trials

Criminal courts-District, state and Union Jurisdiction courts, and their powers. Trials – Principal features of Fair Trial- Types of Trials: Sessions Trial, Summary, Summon, and warrant trials. Judgments – Appeals, Reference, revisions, and transfer. Execution of Sentence. Inquiry of Criminal case in courts- Submission of cognizable case in court- Witnesses and examination of witnesses. Examination in chief, Cross examination, reexamination, and impeaching the credit of witness. Expert Evidence: Medico-legal opinion, Forensic Science expert opinion.

Unit V: Issues in Criminal Trials

Right to pre sentence hearing (ss235 (2) and 248(2) of the Cr.P C.). Kinds of punishment- Death penalty (s354 (3) Cr. P C), Life imprisonment, Sentencing under the Probation of Offenders Act, 1958 and ss360, 361 Cr P C. Role of police, prosecution, and courts in criminal proceedings, Plea-bargaining and victim involvement.

Recommended readings:

1. Ratanlal & Dhirajlal (2002). Law of crimes, 25th edition, Bharat Law House, New Delhi
2. Kelkar, R.V., (2003) *Lectures on Criminal Procedure*, Eastern book Co., Lucknow.
3. Ratanlal and Dhirajlal (1995) *Code of Criminal Procedure*.
4. Sarathy Veppa P. (1994) *Elements of Law of Evidence*, Eastern book Co., Lucknow.
5. Singh, A., (1995) *Law of Evidence*, Allahabad Law agency.

CP3C09: Crime against Women and Children

Unit I: Women rights and Laws

Constitutional Provisions, UDHR, CEDAW, Lahore declaration and Gender Justice Commentary on the Articles, National Commission for Women – Maternity laws. Marriage of Hindu, Christian, and Muslim women – Restitution of Conjugal Rights – Judicial separation laws – Divorce – Maintenance – Succession & inheritance – Family courts, Muslim women and Human Rights. Maternal termination and pregnancy Act, Prevention of immoral Trafficking Act, Prohibition of Indecent Representation of women, Protection of women from Domestic violence Act 2005, Sexual Harassment at Workplace Act, 2013. Feminist Jurisprudence- Understanding Gender Radical Feminism. Liberal Feminism, Radical Feminism, Cultural Feminism and Post Modern Feminism - Gender Issues.

Unit II: Child rights and Laws

Legal Provisions for children in India: Juvenile Justice (Care & Protection of Children) 2015: Salient features of JJ Act 2015. Role of police (JPU, Child Welfare Officers) - Organization and functioning of Juvenile Justice Board and Children Welfare Committees - Non- institutional and Institutional services for juveniles: Organization and functioning - Role of Public and NGOs in the implementation of the JJ Act. Other legislation/policy that affect Children: National Policy for Children, 1974 - National Charter on Children, 2003 - The Child Labour (Prohibition & Regulation) Act, 1986.

Unit III: Crime against Women and Children

Cruelty, Miscarriages, Rape, dowry deaths, domestic violence and gender and sexual harassment, Female infanticide and feticide, Trafficking in women, Stalking, Internet Abuse, and Cell phone abuse (MMS and SMS). Social Crimes against Women, Female infanticide, Child Marriage. Child Abuse & Violence: - Understanding child abuse & its impact - Identifying symptoms of abuse - Legal and psychosocial support - Preventive strategies - Trafficking & exploitation of Children: Understanding trafficking and exploitation- forms & purposes - Strategies and intervention on trafficking and exploitation of children

Unit IV: Issues of Children in India

Situational analysis of vulnerable children in India: Street Children, Child Labour, Trafficked & abused children, Children in conflict with law, Children affected by emergencies & disaster, Children affected by HIV/AIDS & Substance Abuse, Children of families at risk Orphaned abandoned & destitute, Differently abled children.

Unit V: Child protection

Children infected & affected by HIV/AIDS: Understanding basics of HIV/AIDS- Dealing with risk behaviors - Orphans & vulnerable children - Interventions for addressing HIV/AIDS among children (Accessing services) - Dealing with Disaster and emergencies: Assessing the magnitude of the problem (rapid survey & needs assessment) - Understanding the psychosocial impact - Interventions for dealing with impact of disaster on children- techniques of psychosocial interventions.

Recommended readings:

1. Myneni (2002). *Women and Law*, Asia Law House: Hyderabad.

2. Rani, Bela., (1997). *Marriage, family, Violence and Divorce*, Mangal Deep Publications, Jaipur.
3. Saxena, Shobha., (1995). *Crimes against Women and Protective Laws*, Deep and Deep Publications, New Delhi.
4. Asthana, P. (1974) *Women's Movement in India*, Vikas Publishing house, Delhi.
5. Baig, Tara Ali (1976) *India's Women power*, S. Chand, New Delhi.

CP3C09: Police Interrogation Forensics

Unit I: Police interrogation

The aims and purposes, psychology of the interrogated, psychology of the interrogator, getting set for interrogation, qualities of the interrogator, interrogation room psychology. Suspects, crime-doer, criminal, offender, convict: definitions and differences. Meaning of police enquiry, police inquiry, police verification, police questioning, police interviewing, police interrogation and differences among them.

Focusing and following-

Eye contact, non-verbal behavior, verbal following and the impact of eye-contact and contact breaks, recording during the interrogation, natural eye-contact, tone of voice, employment of torture, non-verbal communications signals, staying on the topic, introducing new topics, authoritarian ego, filthy expressions and indecent language during interrogations and their impacts. Mechanics of interrogation: patronizing and false promises, procedure blocks for interrogators, winning over arguments, glances, gestures, sighs, silence and defense mechanisms.

Unit II: Effective Interrogation

Questions: open and closed inquires listening and talking; 'what' questions, 'How' questions, 'can you, could you' questions - the aims and results. Mental blocks, bias, prejudices and preconceived theories and interrogation; Mechanism of interrogation, feeling at ease, initiation of interrogation, continuous closed inquires, leading questions, minimum encouragement, encouragement during interrogation: purpose and result

Defense mechanisms

Understanding the defense mechanisms, frustration and mental conflicts during interrogation, rationalization, projection, repression, suppression, regression, compensation, identification, introjections, sublimation, sympathism, isolation, displacement, emotional insulation, reaction formation undoing (Atonement) and their importance during interrogation. Task oriented interrogation attack (aggression), withdrawal, compromise or tolerance. James's Law of Interrogation and its importance.

Unit III: Reflecting feelings/ emotions

Identifying feelings/ emotions, correct assessment of feelings/emotions and their utility, attitude and aptitude for interrogation. Early stages of interrogation: importance, positive, negative and ambivalent feelings, positive strokes and their effects during interrogation. Cognitive contents, logic and reasonability, discussions during interrogation, understanding the psyche of the interrogated, basic and mixed feelings/emotions. Interpretation of feelings and emotions, and their relevance during investigation of crimes, Transactional Analysis (TA) during interrogation.

Unit IV: Reflecting content/ comprehension

Speaking and comprehension, expression of authority and pseudo authority, language of communication, verbal and non-verbal communication, cognitive and affective aspects, comprehension and reflections, reflection of feelings and contents.

Focusing and following and reflection of contents

Concise, precise and timely summary, summarization of contents interrogated clarifications and confession in helplessness, voluntary confessions and their importance in law.

Communicating feelings and emotions

Identification of the interrogators feelings, introspection and ability to understand oneself, the eyes and ears of the interrogated, non-verbal signals of the interrogated, complimentary verbal messages, open relationship with the interrogated, direct mutual communication, reading between the lines, interrogators response, no excessive immediacy, defense mechanism and immediacy and suspects with different backgrounds.

Unit V: Confronting and cross questioning

Mechanics of confrontation, disturbing relationship, burden of proof, Torture and third degree methods: physical, moral, spiritual, pharmacological and psychological. Timings of confrontation, introducing new topics, excuses and apologies, verifying the suspect's statement, over-enthusiasm for confronting.

Observed discrepancies and collected evidence during interrogation

Threatening and purpose. Self disclosing, Sharing of information, Precautions against misleading, Encouragement by self disclosure, Man to man interrogation, Powerfulness of self disclosure, Self disclosure of the interrogated, Change of topic during self disclosure, Honesty in self disclosure and no overshadowing of the suspect.

Structuring of police interrogation and assessment

Ego-states. police ego, civilian ego, criminal ego and Transactional Analysis. Suspects Defense Mechanisms (SDMs) and Police Defense Mechanism (PDMs) and their interactions and understanding. Transactional Reciprocity Scales to assess the responses of the suspects during interrogation. Scales: individualistic, ideal, majority scales and their importance in transactional analysis and reciprocity. Filtering, goal formation, termination and free/voluntary confession of guilt/ Innocence. **Case laws on interrogation.**

Recommended readings:

1. Bringham, M.V. and B.V. Moore (1941). *How to Interview?*, Harp & Bros, New York.
2. Larson, J.A. (1932). *Lying and its Detection*, University of Chicago Press, Chicago.
3. Magda, A. (1970). *Feelings and Emotions*, Academic Press, New York.
4. Marston, W.M. (1938). *The Lie Detection Test*, Richard R. Smith, New York.
5. Mulbar, H. (1953). *Interrogation*, Charles C. Thomas, Springfield.
6. Skinner, B.F. (1957). *Verbal Behaviour*, Appletion, Century- Crofts, New York.

CP4C011: Criminal Psychology: Theory and Practice

Unit I: An introduction to criminal psychology

Defining crime- Views of crime- History of crime and punishment- The breadth of criminal psychology- Functions of a criminal psychologists- Nature vs Nurture- Crime and human body- Influences of family and environment- Crime and mental disability- Treatment for mental disorders- Age and gender studies in relation to crime:- domestic violence- sexual abuse- prostitution- women and youth crimes- Theories in criminal psychology:- Classical criminology- Rational choice theory- Psychodynamic- Behavioral learning and Cognitive learning- Labelling theories.

Unit II: Victimology and victim services

Forensic psychology and the victims of crime- Legal rights of victims- Crime victimization data- Psychological effects of criminal victimization- Characteristics of victims- Hate or bias crime

victimization- Sexual assault victimization: Relationship of the victim to the offender- Psychological impact of sexual assault- Psychological effects of child sexual abuse- Property crime victimization: Psychological impact of burglary.

Unit III: Police Psychology

History of policing- Trends in police psychology- Types of Police-Current issues and trends- Functions of Police- Police organization and police recruitment- Current problems- Police culture- Police role today- Stress and policing- Police interrogation and False confessions- Types of false confession.

Unit IV: Legal Psychology

Law and Psychology- Social cognition and primacy effect- Effects of media in crime reporting- Types of courts- Types of law- Structure of the court- Trials and sentences- The judicial process- Sentencing strategies- Types of sentences-Expert testimony- Consulting with criminal courts- Consulting with civil courts- The death penalty- Current problems.

Unit V: The criminal justice system and Correctional Psychology

The history of prisons- The prison system- Prisons and imprisonment: the current context- Community penalties- History of punishment- Types of punishment- Theories of punishment- Issues and trends- Correctional Psychology in adult settings- Correctional psychologists- Treatment of special populations.

Criminal Psychology: Practice

Unit I: Investigative Psychology 1

Introduction to Profiling: A Psychological sketch- Criminal profiling:- Dynamic and static factors in prediction- Additional crime scene concepts-Offender profiling- Modus Operandi- Portrait Parle- The psychological autopsy- The geographical profiling- Mental Mapping- Brain Profiling- Interviewing techniques.

Unit II: Investigative Psychology 2

The polygraph: Lie detector- Brief history of polygraph-Current usage of polygraph- Traditional procedures used by polygraphers- Countermeasures- Research on the polygraph- Forensic hypnosis- Facial composites in criminal identification- Identifying the offender: -Identifying the face- unconscious transference- own-race bias (ORB)- Pretrial identification methods.

Unit III: Profile Analysis, Eyewitness testimony and False allegations

FBI profiling:- Four stages- Statistical/actuarial profiling- Does profiling work?- Eye witness testimony as a central issue in forensic and criminal psychology- The accuracy of witness evidence- Later intrusions into eyewitness memory- Eyewitness evidence in court- Children as witnesses- False allegations:- child sexual abuse- False claims of abuse and young children- Assessing the accuracy of young children's reports.

Unit IV: Case studies, case visits and case presentations- Group discussions and debate on criminal cases.

Unit V: Research proposal/Journal work/Research Dissertation in Forensic Clinical Psychology.

Recommended readings:

1. Adrian Raine (1993). The Psychology of crime: Criminal behaviour as a Clinical disorder. Newyork: Harcourt Brome. E. Empr.
2. Arnold. P, Goldstein. (2002). The psychology of group aggression. UK: John Wiley & sons Ltd.
3. Clive. K. et al. (2006). Offending behavior programmes. UK: John Wiley & sons Ltd.
4. Bartol & Bartol. (2004). Introduction to forensic Psychology. Sage publications: USA.
5. Burke, R.H., (2014). An Introduction to Criminological Theory. (4thed). CPI Group Ltd: UK.
6. Maguire, B., & Radosh, P.F., (1999). Introduction to Criminology. Wadsworth Publishing Company: USA.
7. Howitt, D., (2002). Forensic and Criminal Psychology. Pearson Education: USA.
8. Marsh, I., (2011). Crime and criminal justice. Routledge: UK.

CP4C012: Criminal Psychology: Practicals

**CP4C013: Penology, Correctional Administration and Offender
Rehabilitation**

Unit I: Introduction to Penology

Meaning, Definition and Scope, Meaning and Importance of Punishment, Punishment in ancient and modern times, History of correctional administration, Theories of punishment.

Unit II: Prisons

Meaning and Definition of prison, American Prison System, British Prison System, Russian Prison System; History and Development of prisons and prison system in India during Ancient times, British India, Democratic India and today. Prisons in ancient and modern times, Types of prisoners, Prison Reforms (KERALA), Prison Administration.

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Unit III: Prison Acts

History of Prison Legislation in India, Central prison acts, Jail Manuals, Prisons Act and Rules Prison classification, prison labour, prison education, prison discipline, prisons and human rights. Open prisons, women's prisons, institutions for juveniles, remand prisons and undertrial prisoners, security prisoners, civil prisoners, prison reforms in India and in Kerala; Custodial torture in prisons, strategies for personality development of the residents in prison in India and in Kerala.

Unit IV: Forms of Treatment (institutional)

Purpose of Treatment, Types of Institutions. High Security Prison - Treatment, Juvenile institutions and open air institution, Children care home and Fosterage homes with programs, counseling, vocational training and therapeutic treatment.

Unit IV: Non Institutional forms of treatment

Purpose and Importance, Types of non institutional treatment, Probation and Offenders Act, Meaning of Parole and Rehabilitative services, Role of NGO in Rehabilitating prisoners.

Recommended readings:

1. Goswami, B.K. (1980). *Critical Study of Criminology and Penology*, Allahabad Agency, Allahabad.
2. *Mulla Committee Report on Prison Reforms*, 1983. Govt. of India.
3. Naresh Kumar, (1986). *Constitutional Rights of Prisoners*, Mittal Publishers, New Delhi.
4. Paranjpe, N.V., (2002). *Criminology and Penology*, Central Law Publications, Allahabad.
5. Bhattacharya S.K., (1986). *Probation system in India*, Manas Publications, New Delhi.

Elective Course 1: Cyber Crime and Cyber Laws

Unit I: History of Computers

This Chapter talks about how the initial computers were launched and also about the growth path in the same field. Generations – Different Generations of Computers starting from 1937. Introduction to Computers – The exact definition and the initial purpose. Input & Output Devices – Different parts and the usage. Basic Terminologies – The technical terms used while operating computers. Study of Hardware – Exact meaning and why it is known as hardware. Different Parts & Usage – All hardware part and their functions. Study of Software – Exact meaning and the purpose. Types of Software & Its Use – Different Application software's and its function.

Unit II: Computer Networks

Concept of networks and why it is required. Advantages – Total functions & advantages. Different Types of Networks – The networks that are available and its usage. Server / Client Concept – The definition and diagram study of this model, Its Working Culture – Things need to be monitored while working. Study of Internet – Meaning, definition, and history. How Internet System Works – The total working procedure with chart. Electronic Mailing Services – The complete study of e-mail services. How E-mail Works – How it works, advantages, broadcast.

Unit III: Introduction to Browsers

Meaning and definition. Different Types of Browsers – Demo of sample browsers available. How it Works & Different Utilities – How it is used and advantages. Browser Settings – how to set your browser for usage. Things to be Monitored in Browser Settings – The data needs to be collected. Concept of Web – Definition and usage. How Web is Creating – Developing of web and advantages. Introduction to Web Addressing System – Domain name registration and coding. Study of IP Address – Into to internet addressing system and definition.

Unit IV: Study of Online Transactions

Different online transactions used on net. Introduction to Cyber Crime – Meaning and how it came. Different Types of Cyber Crime – Basic types of initial cyber crime. Study of Hardware Related Crimes – Hardware study after committing a crime. Study of Software Related Crimes – Software study after committing a crime. Types of Internet Crimes – Crimes like spoofing, hacking, phishing etc. Various Internet Attacks – Denial of service attack, Net extortion etc. Introduction to Mobile Forensic – Digital evidences and data capturing. Different Terminologies – Technical terms used in this technology.

Unit V: System Safe Guarding Procedures

Different tools and techniques. Introduction to Computer Forensic – Meaning and Formats. Computer Seizure Procedures – Step by step procedure to be maintained. Study of Digital Evidences & Digital Signature – what are digital evidences. Different Tool Kit Used for Forensic Activities – Software & Hardware tools. Introduction to Cyber Law – When it was launched and history. Study of IT Act 2000 – Different IT acts and further amendments. Connecting Acts – Connecting IPC & Cr.PC. Different Case Studies – Live case that had happened in INDIA.

Recommended readings:

1. Albert J. Marcellaa and Robert S. Greenfiled (Ed) (2002) Cyber Forensics, A Field Manual for collecting, examining and preserving evidence of computer crimes, Auerbach publications.
2. Clough, John, 2010, Principles of Cybercrime, Cambridge.
3. David Wall, 2007, Cybercrime, Polity.
4. Derek Atkins et. al., (1997). Internet Security: Professional Reference, Techmedia, Daryaganj, New Delhi
5. Dudley-Sponaule, Alfreda , James Braman and Giovanni Vincenti, 2011, Investigating cyber law and cyber ethics, issues, impact, Information Science Reference.

Elective Course 2: Forensic Clinical Psychology

Unit I: Introduction to Forensic Psychology

Forensic Psychology: An overview- Careers in psychology- Forensic psychology as a new specialty- The development of habitual criminal behavior:- The juvenile offender- Developmental factors in juvenile delinquency- The criminal psychopath- Psychology of violence and intimidation:- Theoretical perspectives on violence- criminal homicide- Multiple murder- Serial killer typologies- Stalking- Psychology of sexual assault:- Date rape- Typologies of men who rape- Pedophilia- Juvenile sex offenders.

Unit II: Introduction to Forensic clinical psychology

Defining the term Forensic clinical psychology- Is crime a social problem? Offending evidence- evaluation and evolution- Clinical classification of aggressive offenders- sexual offenders- sadistic and non sadistic aggressors- crime and psychopathology:- Psychopaths, Conduct disorders and Learning disability- Personality disorders and crime- Online sexual problems.

Unit III: Predictors of aggressive offending

Cognitive distortions and schemas:- Implicit theory- Judgmental model- Path analytic model- Single factor theories- Multifactorial models- Clinical implications- Moral Reasoning: Piaget, Kohler and Kribbs- NOVACOS's Model of anger- General Aggression model- Dynamic predictors like sexual deviancy- Antisocial orientations- Attitude and intimacy deficits- Coping strategies- Schema- Hostile masculinity- suspiciousness- sexual entitlement- and other hypothesized schemas- drug and alcoholism- research in predictors.

Unit IV: Assessment strategies and protocols

Risk assessment instruments- Questionnaires and scaling techniques- Interview based on grounded theory methodology- Experimental and clinical methods- Psychopathological profiles- Socio moral reflection measures- Lip maps.

Unit V: Treatment Strategies and Rehabilitation

Functional Analytic psychotherapy- Behavior modification techniques- Self management- Role play- Fantasy reconditioning- Behavioral Parent training- Cognitive behavioral therapy- Schema focused therapy- Schema recognition and management- Affect/emotions/mood management- Anger management- Aggression replacement training- Family therapy- Functional family therapy- Structural family therapy- Multisystemic therapy- Philosophical and Legal aspects of rehabilitation.

Recommended readings:

1. Adrian Raine (1993). *The Psychology of crime: Criminal behaviour as a Clinical disorder*. Newyork: Harcourt Brome. E. Empr.
2. Arnold. P, Goldstein. (2002). *The psychology of group aggression*. UK: John Wiley & sons Ltd.
3. Clive. K. et al. (2006). *Offending behaviour programmes*. UK: John Wiley & sons Ltd.
4. Bartol & Bartol. (2004). *Introduction to forensic Psychology*. Sage publications: USA.
5. Burke, R.H., (2014). *An Introduction to Criminological Theory*. (4thed). CPI Group Ltd: UK.
6. Maguire, B., & Radosh, P.F., (1999). *Introduction to Criminology*. Wadsworth Publishing Company: USA.
7. Howitt, D., (2002). *Forensic and Criminal Psychology*. Pearson Education: USA.
8. Marsh, I., (2011). *Crime and criminal justice*. Routledge: UK

Elective Course 3: Disaster Management

Unit I: Disasters

Concept, types and impact - Famine, floods, cyclones, hurricanes, warfare, earthquake, volcanoes; traditional and modern disaster threats and care factor, classification of disasters;

Unit II: Disaster management

Definition and concept; approaches to disaster management, importance and relevance of disaster management in the present environmental scenario, cases studies of disaster management.

Unit III: Disaster Intervention

Scope of disaster related intervention, intervention during disaster impact stage, trauma counseling and crisis intervention, post disaster management, damage assessment and long term rehabilitation and reconstruction, networking and co-ordination between government, NGOs, donor agencies, local bodies, police, military etc. Coastal Zone Management, Hill Range management, Forest management, Social Networks.

Unit IV: Disaster Prevention and Preparedness

Vulnerability analysis, hazard mapping, community based disaster preparedness programmes, training for CBDRP, preparedness for post-disaster emergency response and long term rehabilitation, organization and planning, logistics; resource utilization, specialized skills and training needs; public awareness and education; first-aid training, civil defense training. Standards and best Practices in Relief Operations, Ethical Practices, Emergency Operation Plan Development.

Unit V: Institutions and Instruments in Disaster Response

International decade for natural disaster reduction and UN resolutions, administration of relief in India - National, state, district and local levels; Disaster related legislations and policies; national and international donor agencies; NGOs, mental health institutions in disaster management and relief.

Recommended readings:

1. Fritz, C.E 1968 “Disaster”, Sills D (Ed.) International Encyclopedia of Social Science. Vol 4 USA: The MacMillan Company and the Free Press, 202-208.
2. Shader, I and Schwartz A “Management of Reaction of Disaster”, 1966 Social Work, Vol. 11, No. 2.
3. IFRC, 2005, World Disaster Report
4. Chen, L 1973 Disaster in Bangladesh: Health Crisis in a Developing Nation, New York, Oxford University Press.
5. Gangrade, K.D and Dhadde S, 1973, Challenge and Response, Delhi: Rechna Publication.
6. Singh Tej, 2006, Disaster Management: Approaches and strategies, Akansha Publishing House.
7. Parker, Dennis. J, and James K. Mitchell, 1995, Disaster vulnerability of mega cites: An expanding problem that requires rethinking and innovative responses.
8. Sethi, V.K, 2006, Disaster Management, Maxford Books, New Delhi.
9. Prakash Indu, 1994, Disaster Management Rashtra Prahavi, Prakashan.
10. Glown, K. Joanne Me, 2007, Terrorism and Disaster Management (preparing Health Care Leaders for the New Reality) Pentagon Press, Publications.

Elective Course 4: Environmental Criminology

Unit I: Concepts of Environmental Crime

Definition of Environmental Crime, Types of Environmental Crime- Physical Environment, Social Environment, Economic Environment. Pollution- Definition and concept of Pollution. Types of Pollution- Water pollution, Noise pollution, Air Pollution. Theories in relation to Environmental Crime.

Unit II: Causes of Environmental Criminality

Sociological, Psychological, Geographical, Environmental pollution and degradation of ecosystem.

Unit III: Forms of Environmental Crime

Crimes relating to wild life (Wild Life Protection Act Relevant Provisions), Crimes relating to hazardous substances. (The Environment Protection Act, 1986 and rules), Offences causing substantial and irrecoverable damage to the environment (The water Prevention and Control of

Pollution), Act 1974) Chapter VII, Section 41.42-49(AIR (Prevention and Control of Pollution), Act, 1981 Chapter IV- Section 37,38,39,40,41,42,43), Criminal negligence in environmental cases (Relevant provisions under IPC), Industrial pollution as crime reference to Bhopal Gas tragedy.

Unit IV: Proceedings in the Investigation of Environmental Crime

Complaint, Investigation, Burden of Proof, Trial Procedure, Punishment, Judicial Pronouncements.

Unit V: Protection of Environment, Global Perspectives- Prevention and Control Mechanism

India's international obligation, Established norms of environmental law at international level, Montreal Protocol on substance that deplete the ozone layer (1987), UN Framework convention on climate change, 1973 Convention on international trade in endangered species of wild life: fauna and flora, 1992 Biodiversity Convention. Role of co-judiciary, Role of NGOs, Central Pollution Control Board and State Pollution Control Board, Other mechanism.

Recommended readings:

1. Situ, Yingyi, 2000, *Environmental Crime: The Criminal Justice System's role in protecting the environment*, Sage Publication, New Delhi.
2. The Environment (Protection) Act 1986(29 of 1986)
3. Chand Attar (1985). *Environmental Challenges*, UDH Publishers, Delhi
4. Katyal, Timmy and Sataka M. (1989) *Environmental Pollution*, Anmol Publications, New Delhi.
5. Singh Shekar (Ed,) (1984). *Environmental Policy in India*, Indian Institute of Public Administration
6. Situ Yingui and Emmons David, (1996). *Environmental Crimes*, Sage Publications Inc., London.
7. Tewari D.N. (1987) *Victims of Environmental Crisis*, EBD, Educational Pvt Ltd.

Elective Course 5: Digital Forensics

Unit I: Introduction to Computer Forensics

Understanding the need for computer forensics, Defining computer forensics, Computer Hardware, Digital Media, Hard disk basics. Hardware Monitoring – Things to be monitored after a crime detected in hardware in terms of all its peripheral part. Software Monitoring – Things to be monitored after a crime happened in software sector OS and other software's within the system. Different Types Software – Software's that are used widely for different purposes. Different Types of OS – The complete study of different Operating System. OS Structure – The concept and how it works. OS Log File Study – Locating, viewing, adding and monitoring such files. Registry Entry Monitoring – Meaning how it can be checked and monitored. Study of Server OS – How this can be monitored and the differences. Study of Client OS – Things to be noted while checking the registry entry.

Unit II: Study of Hardware Peripherals

Different parts, buffer, buffer memory storage. Different Types of Networks – Complete study of network environment. Network Sharing – How this can be shared & structural diagram with data. Introduction to IP Address – Web addressing system & naming process. Study of IP Monitoring System – Tracking process and monitoring. – The Forensic Toolkit, Forensic hardware, Hardware write/blockers, Hard drive acquisitions, Processing the scene. Different Types of IP Servers – Study of various IP's depends on network. IP Tracking & Monitoring System – How those can be tracked & monitored. Live Cases – Some Live cases that have reported globally. Different Case Studies – How that is been investigated in detail.

Unit III: Different Types of Cyber Crime

Study of Spoofing – Meaning & definition and why it's called spoofing. Different Types of Spoofing – Like email, IP, Web & URL spoofing. Live Case Studies – Discussion of cases relates to this in India. How to Safe Guard – Certain rules that has to be maintained technically. Different Types of Computer & Internet Attacks – Like net bombing, DSA, Threatening cases, server crash (Detailed investigation study). Types of Credit / Debit Card Frauds – Online cheating through economic offences. Face book Crimes – Crimes reported in India and investigation process. Live Case Studies – Some important cases and its come in terms of investigative angle with live records and how awareness program needs to conducted for the same.

Unit IV: Introduction to Cyber Forensic

System Seizing Procedures – The complete steps with formats that need to be followed in different types of seizing depends on various cases. Digital Evidences & Preservation – What are digital evidences and how that can be taken with proof also the preservation methods as per legal formats. Study of Digital Signature – Meaning and definition & structural diagram with different keys that are available. Mobile Forensic & Wi-Fi System Monitoring Process - Tools and formats needs to be maintained forensically while seizing mobile and complete study of Wi-Fi technology with investigative points wholes. Investigation Methods of Cyber Crime Activity – How the investigation needs to be initiated and forward in cases like email spoofing, web spoofing, phishing, net bombing, DSA, net extortion and also some economic offense cases on net. Data Recovery Procedures – Data recovery procedures from HDD, memory cards, other storage devices, servers and terminals. Recovery of Registry Files, Cache Files, Internet Files – Detailed data recovery procedures from these files with evidence collection and preservation. Different Types of Forensic Tools – What are tools and formats relate to this to be maintained and how it has to be produced in the court.

Unit V: Social Engineering

Meaning and definition, how it occurs, how this can be monitored and some safe guarding rules. Bug Exploits – Definition, how it happens, causes and damages and finally how can you protect

your system from these attacks. E-Recovery & Digital Evidence Collection – What does this mean? How data can be recovered the negative impact on that along with crime and how can be safe guarded. IP Tracking & Email Recovery – On net how the various IP can be tracked technically and email recovery procedure from mail and internet servers. Application Attacks, Reverse Engineering & Cracking Techniques – Different software attacks, Definition of RE, purpose, how it is been done and the outcome along with cracking techniques. Introduction to Cyber Law - When it was launched and history. IT Act – 2000 - Different IT acts and further amendments. Connecting Acts - Connecting IPC & Cr.PC. Case Study - Live case that had happened in INDIA.

Recommended readings:

1. R.K. Tiwari, P.K. Sastry and K.V. Ravikumar, *Computer Crimes and Computer Forensics*, Select Publishers, New Delhi (2003).
1. C.B. Leshin, *Internet Investigations in Criminal Justice*, Prentice Hall, New Jersey (1997).
2. R. Saferstein, *Criminalistics*, 8th Edition, Prentice Hall, New Jersey (2004).
2. E. Casey, *Digital Evidence and Computer Crime*, Academic Press, London (2000).

Elective Course 6: New Age Crimes

Unit I: New Age Crimes

Concept and scope within Criminology, Offences under the Special and Local Laws, Challenges in defining laws and their enforcement.

Unit II: Cyber Crimes

Meaning, Nature, Types of cyber crimes, Effect of cyber crime on Economy.

Unit III: Money Laundering

Meaning, Nature, Types of money laundering, Effect of money laundering on Economy.

Unit IV: Organ Transplant Scandals

Organ trafficking, Organ transplant scams, Donor fraud scandals, Prevention of illegal organ transplants; Salient features of Human Organ Transplantation Act-1994.

Unit V: Trans Country Terrorism and Naxalism

Terrorism-National and international, Factors contributing to terrorism, Naxalism in India, Combating terrorism and Naxalism.

Recommended readings:

1. Dr. Gaurav Kataria and Dr. Abhilasha J. Kataria (2016), *Advanced issues in International Criminal Law : Volume-II* White Falcon Self Publishing Platform; 1 edition (2016).
2. Austen Garwood- Gowers, *Living Donor Organ Transplantation: Key Legal and ethical issue* (1999) Dart Month Publishing Company, England.
3. S Mclean, *Contemporary Issues in Law, Medicine and ethics* (Dart Mouth Aldrshot, 1996).
4. Prevention of Money Laundering Act-GOI Publications.
5. Dr. Pramod Kr. Singh.*Laws on Cyber Crimes*.
6. Barkha and U. Ram Mohan-*Cyber laws and cyber crimes*.
7. Vasu Deva.*E-crimes and remedies*.
8. Paul T Augustine.-*Combating Cyber Crimes*.
9. Aravinda Rao K (1996) *Naxalite Terrorism: Social and Legal Issues*; East West Books, Chennai.
10. Baghel LMS (2015) *Terrorism, Naxa.ism, Corruptio and Regionalism: Challenges and threats to development*.
11. Ramesh Chandrs (2003) *Global Terrorism--foreign-policy-in-th-new-millennium-global-crime-trends-vol.-2*. Kalpaz Publications.