

#### **FACULTY OF SCIENCES**

#### Programme Matrix: Bachelor of Science - Forensic Science [2023 Batch]

#### **Programme Outcomes**

After successful completion of B.Sc. Forensic Science programme, a student will be able to:

PO1: integrate scientific temper, spirit of enquiry, humanism and reform

PO2: apply scientific knowledge and skills ethically for societal development and entrepreneurship

PO3: design, execute, and interpret experiments and their results in Forensic Science

PO4: use the techniques of physics, chemistry, biology, and computer science while dealing with evidence and investigation of crime

PO5: employ the practices in forensic science in addressing the current and future challenges in the criminal justice system

PO6: evaluate the importance of evidence obtained at the scene of occurrence

PO7: write reports on crime scenes and evidence analysed to be presented in court as admissible evidence.

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I Semester			
Course Type	Course Code	Course Title	Course Outcomes
DSC	21FSC2T311	Introduction to Forensic Science	<ol> <li>Describe the fundamental concepts in Forensic Science</li> <li>Recall the contribution of various scientists to the development of Forensic Science</li> <li>Explain the working and functioning of Forensic Science Laboratories</li> <li>Connect various agencies to specific protocols in crime investigation.</li> </ol>
DSC	21FSC2L211	Introduction to Forensic Science Practical	<ol> <li>Assess the use of forensic science in criminal cases</li> <li>Illustrate the use of the principle of probability in Forensic Science</li> <li>Create forensic reports and depict information graphically.</li> </ol>
DSC	21FSC2T312	Basic Forensic Chemistry	Understand the fundamental concepts of forensic chemistry     Explain the aspects of inorganic chemistry     Apply the concepts of organic chemistry in Forensic Science     Integrate fundamental analytical chemistry techniques with Forensic Science
DSC	21FSC2L212	Basic Forensic Chemistry Practical	<ol> <li>Prepare standard solutions for working in forensic chemistry laboratory</li> <li>Conduct qualitative analysis of chemical substances</li> <li>Assess the density and viscosity of liquids.</li> </ol>
DSC	21FSC2T313	Criminology	<ol> <li>Describe the fundamental concepts in criminology</li> <li>Summarize the causes and types of crime and criminals</li> <li>Assess the types of punishment</li> <li>Generalize the fundamentals of victimology.</li> </ol>
AECC	22ENG1T312	Musings in English Literature	Articulate the relevant issues of society through the imbibed knowledge of prose     Identify and appreciate nuances of poetry     Implement the basic concepts of grammar and its usage.     ಸಾಹಿತ್ಯದಲ್ಲಿ ಅದಗಿರುವ ವಿವಿಧ ಸಾಮಾಜಿಕ ಮೌಲ್ಯ ಮತ್ತು ಜವಾಬ್ದಾರಿಗಳನ್ನು ಅರಿಯುವರು.
AECC	21KAN1T312	Saahithya Sangama I	<ul> <li>ಭಾಷಾ ಕೌಶಲವನ್ನು ಅಭಿವೃದ್ಧಿ ಪಡಿಸಿಕೊಳ್ಳುವರು.</li> <li>ವಿದ್ಯಾರ್ಥಿಗಳು ತಮ್ಮ ಜೀವನದ ಸೃಜನಶೀಲತೆಯ ಮಹತ್ವವನ್ನು ಚರ್ಚಿಸುವರು.</li> <li>ಹದಿಹರೆಯ ವಯಸ್ಸಿನ ಸಮಸ್ಯೆಗಳು ಹಾಗೂ ಪರಿಹಾರಗಳನ್ನು ವಿಶ್ಲೇಷಿಸುವರು.</li> </ul>
	s		• ಜೀವನದಲ್ಲಿ ಮಾನವ ಪಡೆಯಬೇಕಾದ ಯಶಸ್ಸಿನ ಹಾದಿಯನ್ನು ವಿವರಿಸುವರು.

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AECC	21HIN1T312	Hindi Kahani aur Prayajanmulak Hindi	<ol> <li>हिन्दी कहानी विधा का ज्ञान ग्रहण करने की क्षमता का विकास।</li> <li>विद्यार्थियों में सामाजिक यथार्थ और मुल्यांकन करने का विकास।</li> <li>विद्यार्थियों में कहानी विधा का वर्णन करने की क्षमता का विकास।</li> <li>विद्यार्थियों में कहानी का विश्लेषण और भाषा कौशल में प्रवीणता।</li> </ol>
AECC	22AEN1T311	Listening and Comprehension in English	Identify the barriers to listening and describe the key components that contribute to effective listening     Use their grammatical knowledge to refine their speech and writing     Analyse complex human situations and challenges that emerge from the prescribed texts

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II Semester			
Course Type	Course Code	Course Title	Course Outcomes
DSC	21FSC2T321	Crime Scene Management	<ol> <li>Distinguish the types of crime scenes, evidence and the personnel involved in crime scene investigation</li> <li>Evaluate a crime scene and conduct the process of investigation of a scene of crime</li> <li>Choose the right method of collection and preservation of evidence found at the crime scene</li> <li>Prepare a report on the crime scene and reconstruct a crime scene.</li> </ol>
DSC	21FSC2L221	Crime Scene Management Practical	<ol> <li>Demonstrate the techniques of securing and searching of indoor and outdoor crime scenes</li> <li>Sketch crime scenes using baseline and triangulation techniques</li> <li>Use the best technique for the collection and preservation of evidence from the scene of crime</li> <li>Predict the series of events of a simulated crime by performing crime scene reconstruction.</li> </ol>
DSC	21FSC2T322	Basic Forensic Biology	<ol> <li>Recall the concepts of plant and animal biology</li> <li>Describe the working and functions of the systems of the human body</li> <li>Relate the field of microbiology and its application in the field of forensic science</li> <li>Illustrate the concepts of genetics and inheritance.</li> </ol>
DSC	21FSC2L222	Basic Forensic Biology Practical	<ol> <li>Distinguish the features of animal and plant cell</li> <li>Examine the characteristics of pollen, bacteria, human epithelial cells, diatoms and plant product</li> <li>Recognize human hair and human karyotype.</li> </ol>
DSC	21FSC2T323	Criminal Law	Describe the organizations involved in the criminal justice system     Point out the provisions of the Indian Penal Code with respect to the offences     Appraise the provisions of the Code of Criminal Procedure that apply to forensic science     Summarize the provision of the Indian Evidence Act and some minor acts.
AECC	22ENG1T322	Glimpses: Readings from English Literature	<ol> <li>Identify the themes and relevant issues through the study of prose and poetry</li> <li>Develop the skill to identify the pertinent themes and characters in the novel</li> <li>Implement new approaches in speaking and writing skills.</li> </ol>
AECC	21KAN1T322	Saahithya Sangama II	1: ಸಾಹಿತ್ಯದಲ್ಲಿ ವೃಕ್ತವಾಗಿರುವ ಮಾನವೀಯ ಮೌಲ್ಯಗಳನ್ನು ಅರಿಯುವರು 2: ಸಾಹಿತ್ಯದಲ್ಲಿ ಅಡಗಿರುವ ಸಾಮಾಜಿಕ ಮೌಲ್ಯಗಳನ್ನು ಅರಿಯುವರು. 3: ಯುದ್ಧದಿಂದಾಗುವ ಅನಾಹುತಗಳನ್ನು ಅರಿಯುವರು. 4: ಮಾನ್ಯವಿಲ್ಲದ ಜಾತಿ ಬೇಧಭಾವಗಳ ಬಗ್ಗೆ ಅರಿಯುವರು. 5: ಜೀವನ ಕೌಶಲವನ್ನು ಅಭಿವೃದ್ಧಿ ಪಡಿಸಿಕೊಳ್ಳುವರು.

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AECC	21HIN1T322	Hindi Kavitha aur Anuvaad Koushal	1: हिन्दी कविता का विश्लेषण एवं समझने की योग्यता का विकास। 2: विद्यार्थियों में सामाजिक यथार्थ और मूल्यांकन करने का विकास। 3: कविता में वर्णित कथा का वर्णन एवं काव्य सृजन करने का विकास। 4: अनुवाद एवं भाषा कौशल में प्राविण्यता।
AECC	22AEN1T321	Conversation Practice in English	<ol> <li>Acquaint students with listening skills and grammar.</li> <li>Enable students to analyse the prescribed texts based on relevant themes.</li> <li>Introduce students to varied genres of writing in English.</li> </ol>
AECC	21EVS1T321	Environmental Studies	<ol> <li>Understand the concept of Environment and ecosystems</li> <li>Gain knowledge on various components controlling the stability of ecosystem</li> <li>Understand the Policies and laws pertaining to the welfare of life forms.</li> </ol>

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III Semester			
Course Type	Course Code	Course Title	Course Outcomes
DSC	21FSC2T331	Forensic Dermatoglyphics	<ol> <li>Explain the fundamentals of friction ridges</li> <li>Classify fingerprints for purpose of comparison and identification</li> <li>Analyze fingerprints obtained in the crime scene</li> <li>Evaluate impression evidence obtained from the scene of crime.</li> </ol>
DSC	21FSC2L231	Forensic Dermatoglyphics Practical	Demonstrate collection and analysis of fingerprints     Compare a disputed print with a standard print     Analyse the characteristics of footprints and palm prints.
DSC	21FSC2T332	Advanced Forensic Chemistry	<ol> <li>Describe the analysis of exhibits encountered in forensic chemistry</li> <li>Analyze arson and petroleum exhibits</li> <li>Assess the exhibits encountered in explosion cases</li> <li>Evaluate evidence related to alcohol.</li> </ol>
DSC	21FSC2L232	Advanced Forensic Chemistry Practical	<ol> <li>Analyze standard products to determine adulteration</li> <li>Evaluate arson and explosive related evidence</li> <li>Assess the alcohol in a sample.</li> </ol>
DSC	21FSC2T333	Technological Methods in Forensic Science	<ol> <li>Explain the working and applications of microscopy</li> <li>Differentiate between the types of chromatography</li> <li>Appraise the techniques of electrophoresis</li> <li>Summarize the types of spectroscopy used in forensic science.</li> </ol>
DSC	21FSC2L233	Technological Methods in Forensic Science Practical	<ol> <li>Analyze evidence using microscopy</li> <li>Separate inorganic and organic mixtures using chromatography</li> <li>Measure the quantity of substances using spectroscopy.</li> </ol>
AECC	21ENG1T332	Symphony of English Literature	<ol> <li>Identify the themes and relevant issues through the study of prose and poetry</li> <li>Develop the skill to identify the pertinent themes and characters in the novel</li> <li>Implement new approaches in speaking and writing skills.</li> </ol>
AECC	21KAN1T332	Saahithya Sangama III	<ol> <li>ಸಾಹಿತ್ಯದಲ್ಲಿ ಅಡಗಿರುವ ವಿವಿಧ ಸಾಮಾಜಿಕ ಮೌಲ್ಯ ಮತ್ತು ಜವಾಬ್ದಾರಿಗಳನ್ನು ಅರಿಯುವರು.</li> <li>ಭಾಷಾ ಕೌಶಲವನ್ನು ಅಭಿವೃದ್ಧಿ ಪಡಿಸಿಕೊಳ್ಳುವರು.</li> <li>ವಿದ್ಯಾರ್ಥಿಗಳು ತಮ್ಮ ಜೀವನದ ವರ್ತಮಾನದ ಘಟನೆಗಳ ಕುರಿತು ಚರ್ಚಿಸುವರು.</li> <li>ಹದಿಹರೆಯ ವಯಸ್ಸಿನಲ್ಲಿ ಅರಿಯಬೇಕಾಗಿರುವ ಶಾಂತಿ-ಸೌಹಾರ್ದತೆಯ ಕುರಿತು ವಿಶ್ಲೇಷಿಸುವರು.</li> <li>ಜೀವನದಲ್ಲಿ ಮಾನವನು ಬೆಳಸಿಕೊಳ್ಳಬೇಕಾದ ಬಹುಮುಖ್ಯ ಅದರ್ಶ, ತತ್ವಗಳ ಕುರಿತು ಚರ್ಚಿಸುವರು.</li> </ol>

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AECC	21HIN1T332	Hindi Natak Sahitya aur Sanchar Maadhyam evam Hindi	1:हिन्दी नाटक विधा को समझना और अभिनय करने की योग्यता का विकास। 2:विद्यार्थियों में सामाजिक यथार्थ और मुल्यांकन करने का विकास। 3: नाटक लेखन और पठन में रूचि एवं सृजनात्मक कौशल्य का विकास। 4: संचार माध्यम कला में प्राविण्यता।
AECC	21AEN1T331	Essential English Reading	<ol> <li>Recognize the techniques of effective reading and demonstrate their competence in comprehension.</li> <li>Articulate their thoughts and structure written compositions as needed in official contexts</li> <li>Formulate their responses to contemporary challenges that emerge from the prescribed texts.</li> </ol>

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IV Semester			
Course Type	Course Code	Course Title	Course Outcomes
DSC	21FSC2T341	Questioned Documents	<ol> <li>Describe the examination of questioned documents</li> <li>Point out the characteristics of signature and handwriting</li> <li>Evaluate cases related to questioned document examination</li> <li>Compare questioned documents with exemplars.</li> </ol>
DSC	21FSC2L241	Questioned Documents Practical	<ol> <li>Analyse the class and individual characteristics of questioned documents</li> <li>Write questioned document examination reports</li> <li>Distinguish genuine and counterfeit currency notes and passports.</li> </ol>
DSC	21FSC2T342	Advanced Forensic Biology	<ol> <li>Describe the forensic significance of blood and body fluids</li> <li>Analyze hair samples encountered in crime investigation</li> <li>Appraise the importance of botanical evidence</li> <li>Hypothesize the reconstruction of the crime scene using blood pattern analysis.</li> </ol>
DSC	21FSC2L242	Advanced Forensic Biology Practical	<ol> <li>Analyze blood and body fluids as evidence</li> <li>Infer the significance of hair evidence</li> <li>Assess the evidentiary value of pollen and blood spatter.</li> </ol>
DSC	21FSC2T343	Forensic Psychology	<ol> <li>Explain the concepts of psychology</li> <li>Illustrate the applications of forensic psychology</li> <li>Assess the relationship between psychology and criminal behaviour</li> <li>Recommend the tools and techniques for use in forensic psychology.</li> </ol>
AECC	21ENG1T342	Ruminations of English Literature	Articulate the relevant social issues and thematic representation in prose and poetry     Analyse the characters, plot, setting and themes of novel     Acquire vital employability skills and employment opportunities with in-depth knowledge of writing skills.
AECC	21KAN1T342	Saahithya Sangama IV	1: ಸಾಹಿತ್ಯದಲ್ಲಿ ಅಡಗಿರುವ ವಿವಿಧ ಸಾಮಾಜಿಕ ಮೌಲ್ಯ ಮತ್ತು ಜವಾಬ್ದಾರಿಗಳನ್ನು ಅರಿಯುವರು. 2: ಭಾಷಾ ಶೌಶಲವನ್ನು ಅಭಿವೃದ್ಧಿ ಪಡಿಸಿಕೊಳ್ಳುವರು. 3: ವಿದ್ಯಾರ್ಥಿಗಳು ತಮ್ಮ ಜೀವನದಲ್ಲಿ ಧಾರ್ಮಿಕ ಸಹಿಷ್ಣುತೆಯ ಮಹತ್ವವನ್ನು ಚರ್ಚಿಸುವರು. 4: ಶ್ರೀಸಾಮಾನ್ಯನ ಬದುಕಿನ ಸಮಸ್ಯೆಗಳು, ಬವಣೆಗಳು ಹಾಗೂ ಪರಿಹಾರಗಳನ್ನು ವಿಶ್ಲೇಷಿಸುವರು. 5: ದಮನಿತ ಲೋಕದ ಶೋಷಣೆಯ ಭಿನ್ನ ರೂಪಗಳ ಕುರಿತು ಚರ್ಚಿಸುವರು.

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AECC	21HIN1T342	Hindi Laghu Upanyas aur Bhasha Ke Vividh Roop	<ol> <li>हिंदी उपन्यासों का ज्ञान ग्रहण और समझने की योग्यता का विकास।</li> <li>विद्यार्थियों में सामाजिक यथार्थ और मुल्यांकन करने का विकास।</li> <li>लघु उपन्यास की कथा का वर्णन और विश्लेषण करने की क्षमता का विकास।</li> <li>भाषा के विविध रूपों एवं भाषा कौशल में प्राविण्यता।</li> </ol>
AECC	21AEN1T341	Fundamentals of English Written Communication	<ol> <li>Examine the features of effective writing and demonstrate their skills in complex, non-formulaic writing</li> <li>Identify and fix common stylistic errors in written English</li> <li>Analyze the representation of cross-cutting issues in literary works.</li> </ol>
AECC	21INC1T341	India and Indian Constitution	<ol> <li>Evaluate the philosophy of the Constitution and its structure</li> <li>Appraise the powers and functions of various offices under the Constitution</li> <li>Analyze the Indian values, Ideals and the role of Constitution in a Democracy.</li> </ol>

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