

DESH BHAGAT AYURVEDIC COLLEGE & HOSPITAL

Mandi Gobindgarh, Punjab | Affiliated to Desh Bhagat University, Mandi Gobindgarh, Punjab

DEPARTMENT OF AGAD TANTRA

Forensic Medicine • Toxicology • Medical Jurisprudence • Clinical Toxicology

INTRODUCTION

The Department of Agad Tantra at Desh Bhagat Ayurvedic College & Hospital, Mandi Gobindgarh, Punjab, stands as one of the most intellectually rich and clinically significant departments within the BAMS curriculum. Rooted in the ancient Ayurvedic science of Agad Tantra — one of the eight classical branches (Ashtanga Ayurveda) — the department seamlessly integrates time-honoured classical knowledge with the rigorous demands of modern Forensic Medicine, Toxicology, Medical Jurisprudence, and Clinical Toxicology.

Agad Tantra, derived from the Sanskrit words 'Agad' (meaning a substance that neutralises poison or poison itself) and 'Tantra' (meaning science or technique), encompasses an exhaustive body of knowledge pertaining to poisons, their classification, modes of action, clinical manifestations, diagnosis, antidotes, and their medico-legal implications. The department is committed to producing Ayurvedic physicians who are not only skilled clinicians but also medico-legally aware, ethically grounded, and socially responsible professionals.

Affiliated to Guru Ravidas Ayurved University, Hoshiarpur, and operating in full compliance with the curriculum guidelines of the National Commission for Indian System of Medicine (NCISM), the department provides structured theoretical instruction, practical demonstrations, and museum-based experiential learning to BAMS 2nd Professional students.

VISION & MISSION

VISION

To emerge as a nationally recognised centre of excellence in Agad Tantra and Forensic Sciences, fostering quality education, innovation in pedagogy, interdisciplinary research, and a deep respect for the classical Ayurvedic heritage.

MISSION

To develop competent, compassionate and medico-legally aware Ayurvedic physicians equipped with toxicological expertise, sound ethical values, strong clinical reasoning, and professional competence to serve society with integrity.

FACULTY PROFILE

The department is helmed by experienced, dedicated, and academically accomplished faculty members who bring a rare combination of classical Ayurvedic scholarship and contemporary forensic expertise. Both faculty members are actively engaged in teaching, student mentoring, curriculum development, academic administration, and collaborative research.

Faculty Member

Designation

Roles & Responsibilities

Dr. Ashwani Vashista	Associate Professor & Head of Department	Academic leadership, departmental administration, curriculum oversight, student mentoring, research guidance
Dr. Amandeep Sharma	Associate Professor	Theory & practical teaching, NCISM curriculum delivery, research (Co-PI, ICMR), academic documentation

INFRASTRUCTURE & LEARNING ENVIRONMENT

The department is equipped with a comprehensive and purpose-built infrastructure designed to support multi-modal learning, practical skill development, and research activity. The physical and academic environment reflects the dual identity of the department — honouring classical Ayurvedic tradition while embracing contemporary forensic science.

Classroom & Teaching Facilities

Spacious, well-ventilated classrooms with ICT-enabled audio-visual teaching aids form the backbone of didactic instruction. Smart boards, overhead projectors, slide-sharing systems, and digital presentation tools are routinely employed to enhance the quality of lectures, tutorials, and interactive sessions. The academic workstations support faculty in preparation of course materials, assessments, research manuscripts, and presentations.

Departmental Museum

The museum is a cornerstone of the department's pedagogical identity. Carefully curated and meticulously maintained, it serves as a living repository of toxicological and forensic knowledge. Students gain direct visual and conceptual exposure to specimens and exhibits that go far beyond the scope of textbook descriptions. Museum teaching sessions are structured as an integral part of the practical curriculum.

Museum holdings include:

- Preserved biological and botanical poison specimens — illustrating animal, plant, and mineral toxins referenced in classical Agad Tantra texts
- Forensic pathology and medico-legal exhibits — depicting wound patterns, injury morphology, and post-mortem changes
- Fingerprint and dactyloscopy demonstration sets
- Anatomical models relevant to trauma, hanging, drowning, burns, and sexual offences
- Medico-legal charts and flowcharts covering poisoning management, documentation, and legal procedures
- Toxicological teaching aids — antidotes, gastric lavage sets, model prescription kits
- Medico-legal examination proforma, inquest reports, wound certificates, and documentation specimens

ACADEMIC ACTIVITIES

The department adopts a holistic and student-centric approach to academic delivery, encompassing a wide array of teaching-learning methodologies designed to develop clinical competence, critical thinking, and professional responsibility.

- ◆ Structured classroom lectures on theory topics
- ◆ Practical demonstrations in museum and laboratory
- ◆ Case-based learning and discussion sessions
- ◆ Student seminars and presentations
- ◆ Workshops and guest lectures
- ◆ Problem-solving exercises in toxicology
- ◆ Medico-legal documentation practice
- ◆ Interactive quiz and revision sessions
- ◆ Spotting exercises in the museum
- ◆ Role-play for medico-legal scenario training

The didactic component covers the entire prescribed NCISM syllabus, including Agad Tantra as per classical texts (Charaka, Sushruta, Ashtanga Hridayam), forensic toxicology, principles of medical jurisprudence, environmental and occupational toxicology, clinical management of poisoning, and medico-legal documentation. Practical sessions reinforce theoretical learning through hands-on engagement with specimens, models, and case simulations.

RESEARCH ACTIVITIES

The department maintains a vibrant research culture, encouraging faculty and students to engage with evidence-based Ayurvedic science and contribute to the growing body of scholarly literature at the interface of Ayurveda and modern medicine.

Research endeavours include:

- ICMR-funded project on Navkarshik Ghan Vati in experimental gout — Dr. Amandeep Sharma serves as Co-Principal Investigator alongside the Principal Investigator, Dr. Hem Raj
- Encouragement of undergraduate and postgraduate research project dissertations
- Faculty publications in peer-reviewed Ayurvedic, forensic, and biomedical journals
- Presentation of research findings at national and international conferences
- Participation in inter-departmental and inter-institutional collaborative research initiatives
- Evidence-based learning exercises integrated into the curriculum to develop research aptitude among students

STUDENT LEARNING OUTCOMES

Graduates of the BAMS 2nd Professional program from this department are equipped with a robust set of competencies that prepare them for responsible clinical practice, medico-legal duties, and lifelong professional development. On successful completion of the course, students demonstrate:

Clinical Competencies

- Recognition and management of acute and chronic poisoning
- Application of antidotes and supportive care principles
- Identification of plant, animal and mineral poisons
- Proficiency in gastric lavage and emergency toxicology

Medico-Legal & Ethical Competencies

- Preparation of wound certificates, inquest reports, MLCs
- Understanding of Indian Penal Code and Medical Ethics
- Proper documentation in medico-legal cases
- Professional conduct, patient rights and informed consent

KEY STRENGTHS OF THE DEPARTMENT

- ✓ Experienced, dedicated and research-active faculty
- ✓ Well-curated departmental museum and specimen collection
- ✓ NCISM-compliant academic environment and curriculum delivery
- ✓ ICT-enabled teaching infrastructure

- ✓ Harmonious integration of Ayurvedic and modern forensic sciences
- ✓ Active research culture with ICMR-funded project
- ✓ Student-centric practical and experiential learning approach
- ✓ Strong emphasis on medico-legal competence, ethics and documentation

"विषं विषमिव घ्नन्ति गदाः प्रतिगदैर्यदा" — The Department of Agad Tantra trains physicians who can counter poison with science, safeguard justice with knowledge, and uphold the highest traditions of Ayurvedic healing.

DEPARTMENTAL PHOTO GALLERY



Faculty Conducting Practical Teaching through Smart Board Technology



Departmental Museum and Demonstration Hall showcasing practical teaching-learning activities.



Faculty Academic Workstation – Dr. Amandeep Sharma engaged in departmental academic activities.



Dr. Ashwani Vashista Facilitating Practical Learning Through Departmental Museum Resources.