

FORENSIC SCIENCE (FORS)

FORS 3331. Foundations of Applied Anthro. 3 Hours.

This is an introductory course on the study of the biology of humans from an applied anthropological perspective. It is a foundation course for students interested in careers in applied anthropology, biological or forensic anthropology, nursing, medicine, or crime scene investigation. The course will introduce the student to all four fields of anthropology: archaeology (prehistoric and historic human activity), cultural anthropology (medical practices in past and present cultures), biological anthropology (primates, basic genetics, human evolution, human biological diversity, and forensic anthropology), and linguistics (language and communication and forensic linguistics) and how these fields are intertwined and applied in a variety of disciplines. The course content focuses predominantly on biological aspects of man and in human society.

FORS 3366. Forensic Science. 3 Hours.

This course introduces students to a wide variety of forensic science disciplines. Students will gain basic knowledge of evidence handling, fingerprints, impression evidence, trace evidence, firearms and toolmarks, serology and forensic DNA, controlled substances and toxicology.

FORS 3380. Intro to Forensic Chemistry. 3 Hours.

This course provides an introduction to forensic chemistry. Current practices, technologies, and techniques will be discussed for some of the most common forensic chemistry disciplines.

Prerequisite: CHEM 2325 and FORS 3366.

FORS 3420. Hum Osteol Analys of Hum Bone. 4 Hours.

This course thoroughly examines the human musculoskeletal system. The course covers the structure and function of bone including bone growth and development and the distinction between juvenile and adult skeletal elements. The course is designed to equip the student with thorough knowledge of the normal appearance of the human skeleton and its variation caused by population variation, genetic disorders, diseases, or trauma.

FORS 4077. Special Topics in Forensic Sci. 1-4 Hours.

This course is designed to give advanced undergraduate students academic flexibility by allowing them to take structured courses on emerging topics or other matters about which there are no courses already approved in the catalog. Variable Credit (1-4).

Prerequisite: Senior standing.

FORS 4310. Physical Evidence Techniques. 3 Hours.

This course provides an overview of physical evidence concepts and identification techniques. Pattern recognition of physical evidence, including fingerprints, bloodstains, gunshot residue, tire prints, shoeprints, fire investigation, firearms, and digital evidence will be discussed. The use of electronic databases in pattern evidence comparison will be addressed. Prerequisite: FORS 3366.

FORS 4320. Fundamentals of Forensic Bio. 3 Hours.

This course explores fundamental principles of forensic biology including serology and DNA. Current technologies and procedures used within the field of forensic biology will be discussed.

Prerequisite: FORS 3366.

FORS 4330. Fingerprint Examination. 3 Hours.

Students will learn the process of fingerprint identification including the nature, physiological properties and morphogenesis of fingerprints. Students will cover the different methods of physical and chemical development of fingerprints from various surfaces, the interpretation of fingerprint patterns and their classification, as well as the methodology of Analysis, Comparison, Evaluation and Verification (ACE-V) that fingerprint examiners apply in their casework.

Prerequisite: FORS 4310.

FORS 4343. Advanced Techniques in Forensic Anthropology. 3 Hours.

This course provides practical experience in the application of various methods that aid in the identification of unknown skeletal remains, such as geometric morphometrics and digital imaging. Students will understand the histology and biomechanics of bone and identify and differentiate bone pathology from bone trauma. The course will train students in proper writing in forensic anthropology, manuscript preparation including photography of bone trauma and pathology.

Prerequisite: FORS 4442.

FORS 4364. Crime Scene Invstg Techniques. 3 Hours.

This course provides a foundational overview of criminalistics from the standpoint of crime scene investigation. Theoretical understanding and hands-on experience in crime scene processing is provided. Basic criminalistic and laboratory techniques are introduced and discussed.

Prerequisite: FORS 3366.

FORS 4380. Ethics & Prof Practice. 3 Hours.

This course provides an overview of ethics and professional practice in forensic science. Ethical dilemmas, bias, and organizational culture will be explored.

Prerequisite: FORS 3366.

FORS 4442. Intro to Forensic Anthropology. 4 Hours.

This course equips students with the methodologies and applications of forensic anthropology. The course includes extensive hands-on exercises working with the human skeletal system. Students will learn and apply the methods used in building the human biological profile, which includes the determination of sex, age, ancestry, and stature based on skeletal features. Students learn the biomechanics of bone and identify skeletal pathologies and/or trauma. **Prerequisite:** FORS 3420.