FORENSIC SCIENCE (FORS)

FORS 3331. Foundations of Applied Anthropology. 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. Students are introduced 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. Course Equivalents: CRIJ 3331 .

FORS 3366. Forensic Science. 3 Hours.
Students are introduced to a wide variety of forensic science disciplines. Students gain basic knowledge of evidence handling, fingerprints, impression evidence, trace evidence, firearms and toolmarks, serology and forensic DNA, controlled substances and toxicology. Course Equivalents: CRIJ 3366 .

FORS 3380. Introduction to Forensic Chemistry. 3 Hours.
Students are provided an introduction to forensic chemistry. Current practices, technologies, and techniques are discussed for some of the most common forensic chemistry disciplines.
Prerequisite: CHEM 2325 and FORS 3366.

FORS 3420. Human Osteology: Analysis of Human Bone. 4 Hours.
Students thoroughly examines the human musculoskeletal system, covering 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. Course Equivalents: CRIJ 3420 .

FORS 4077. Special Topics in Forensic Science. 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.
Students are provided 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 are addressed. Prerequistie: FORS 3366.

FORS 4317. Applied Statistics for Forensic Science. 3 Hours.
Students apply statistical methods to forensic science problems. Concepts including data distributions, sampling, significance and confidence intervals, likelihood ratios, probability, conditional probability, Bayes? theorem, and odds may be included. Measurement uncertainty and metrological traceability are also covered to meet forensic laboratory accreditation requirements. Statistics are applied to problems relating to topics such as forensic toxicology, seized drugs, trace evidence, firearms, and questioned documents.

FORS 4320. Fundamentals of Forensic Biology. 3 Hours.
Students explore fundamental principles of forensic biology including serology and DNA. Current technologies and procedures used within the field of forensic biology are discussed.
Prerequisite: FORS 3366.

FORS 4330. Fingerprint Examination. 3 Hours.
Students learn the process of fingerprint identification, including the nature, physiological properties and morphogenesis of fingerprints. Students 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.
Students are provided 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 gain understanding in the histology and biomechanics of bone and identify and differentiate bone pathology from bone trauma. In addition, students are trained in proper writing in forensic anthropology and manuscript preparation, including photography of bone trauma and pathology.
Prerequisite: FORS 4442.

FORS 4364. Crime Scene Investigation Techniques. 3 Hours.
Students are provided 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. Course Equivalents: CRIJ 4364
Prerequisite: FORS 3366.

FORS 4380. Ethics and Professional Practice. 3 Hours.
Students are provided an overview of ethics and professional practice in forensic science. Ethical dilemmas, bias, and organizational culture are explored.
Prerequisite: FORS 3366.

FORS 4442. Introduction to Forensic Anthropology. 4 Hours.
Students are equipped with the methodologies and applications of forensic anthropology. The course includes extensive hands-on exercises working with the human skeletal system. Students 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.
Course Equivalents: CRIJ 4442
Prerequisite: FORS 3420.