

underlie investigative profiling. Compares and evaluates actuarial and clinical approaches in constructing offender profiles. Looks at the utility and reliability of profiling in criminal investigations.

FBS 244. Risk Assessment of Violent Offenders (3)

Prerequisites: FBS 201, 202, 203, 204, 221, 222, 223, 224, and 225. Examines risk assessment in forensic populations by evaluating empirical research on the subject; covers impact on judicial proceedings and legislative policies. Compares usefulness of various models and instruments of risk assessment for forensic populations.

FBS 245. Expert Witness Testimony (3)

Prerequisites: FBS 201, 202, 203, 204, 205, 221, 222, 223, 224, and 225. Explores role of the expert witness in the courtroom and in litigation. Studies legal standards of admissibility, such as scientific research on expert testimony. Probes ethical challenges related to adversarial advocacy.

FBS 247. Seminar in Forensic Behavioral Science (3)

Prerequisite: FBS 201, 202, 203, 204, 221, 222, 223, 224, and 225. Primarily for those students interested in research careers in forensic sciences. Topics include perceptual, cognitive, and psychophysiological factors in forensically relevant settings, including police activities, investigation, courtroom and incarceration, and crime scenes and criminal activity.

FBS 261. Microscopy and Materials Analysis (3)

(Same as CHEM 250) Prerequisites: FBS 201, 202, 203, 204, and 205. Key concepts, principles, and practice of forensic science emphasizing the nature of physical evidence. Separate instruction on drug analysis, toxicology, and DNA analysis. Demonstration of relevant instrumentation and techniques. Lab facility tours.

FBS 262. Personal Identification and Analytic Methods (3)

Prerequisites: FBS 201, 202, 203, 204, and 205. Various technologies for human identification. Value and reliability of methods used for identification through physical evidence at crime scenes and related events. Case studies and key concepts.

FBS 263. Forensic DNA Analysis (3)

Prerequisites: FBS 201, 202, 203, 204, and FBS 205. Provides an understanding of forensic DNA analysis, from extraction of DNA from biological tissues commonly

encountered in forensic practice through typing and interpretation of profiles obtained to the presentation of these types of data in courts of law.

FBS 264. Analysis of Toxic Chemicals (3)

Prerequisites: FBS 201, 202, 203, 204, and 205. Introduction into the analysis of toxic chemicals, including theoretical and practical considerations regarding the separation, detection, and quantitative determination of toxicants via chemical and instrumental techniques.

FBS 265. Failure Analysis (3)

Prerequisites: FBS 201, 202, 203, 204, 205, 261, 262, 263, and 264. Focuses on understanding the way materials fail. Looks at effects of high temperatures, mechanical deformation, and corrosion on the properties of materials. Discusses forensics and methodologies for investigating materials' failures, including optical microscopy, X-ray analysis, and scanning electron microscopy.

FBS 266. Scientific Evidence (3)

Prerequisites: FBS 201, 202, 203, 204, 205, 261, 262, 263, and 264. Fundamental principles pertaining to the laws of evidence and seminal case law; standards of admissibility of scientific evidence. Legal environment and purpose of expert testimony. Fundamental principles of philosophy of science and statistics related to court decision-making on evidence admissibility.

FBS 267. Molecular Techniques (3)

Prerequisites: FBS 201, 202, 203, 204, 205, 261, 262, 263, and 264. Overview of state-of-the-art techniques in molecular biology. Explores current research literature that covers various aspects of gene expression and regulation. Looks at molecular, cellular, and genetic bases for different processes involved.

FBS 269. Forensic Anthropology (3)

Prerequisites: FBS 201, 202, 203, 204, 205, 261, 262, 263, and 264. Knowledge of osteological techniques to aid in the analysis of decomposed or skeletonized remains of human origin to identify unknown individuals. Covers field of forensic anthropology, recovery techniques of human remains, and the development of biological profiles.

FBS 274. Topics in Forensic Science (3)

Prerequisites: FBS 201, 202, 203, 204, 205, 261, 262, 263, and 264. Specific methods of analysis in contemporary forensic science. Current and future forensic science practice. Recent advances in pure and applied research. Theoretical concepts in current practice.

FBS 290. Independent Study (3)

Gives students experience in planning a course of study on their own initiative under departmental supervision. Deals with special interest not covered in regular courses or explores a regular class subject in greater depth.

FS 292. Readings in Forensic and Behavioral Sciences (3)

Prerequisite: permission of instructor. Individually directed readings in an area of special concern to the student's graduate program; appropriate written reports and evaluation required. Individual student conferences.

FBS 299. Dissertation (3)

Prerequisite: completion of all core and option courses. Preparation, completion, and submission of an acceptable dissertation for the doctoral degree.

IN-SERVICE COURSE

(See *Catalog Numbering System*.)

Criminology (CRIM)

CRIM 302. Topics in Criminology

(1-3; max total 3)

May be repeated for credit provided different fields are covered. Prerequisite: permission of instructor. Selected areas in the organization, administration, and management of agencies engaged in the administration of justice; the police function; prosecution of criminal offenses; the correctional process, deviant behavior.