

Department/Program:

## Forensic Science

Majors, Minors & Degrees:

### Minors

Forensic Science

### Courses

#### FORSC 1100 Introduction to Forensic Science (3 hours)

Introduction to Forensic Science and its application, stressing a multi-disciplinary approach and the interface of science with ethics and the legal system. Crime scene investigation, evidence collection, questioned documents, the collection and analysis of body fluids and DNA, firearms and tool marks, and crime scene reconstruction will be included.

#### FORSC 3970 Internship (1-8 hours)

An on-the-job experience oriented toward the student's major interest. The student is to secure a position in an organization that satisfies the mutual interests of the instructor, the sponsor, and the student.

*Prerequisite(s):* Permission of the department chair.

#### FORSC 4050 Fundamentals of Crime Scene Investigation (3 hours)

This course introduces the participant to forensic science paradigms, crime scene investigation and evidence recognition. Collection, documentation and processing evidence are addressed. The course will include an introduction to crime scene photography. Students will be oriented in professional values, concepts, and ethics.

*Prerequisite(s):* Junior or Senior status in Criminal Justice Adult Undergraduate Program.

#### FORSC 4060 Fundamentals of Evidence Processing (3 hours)

The course introduces the participant to the forensic science paradigms regarding evidence processing, including lab practices, statistical evaluation of the evidence, and scene reconstruction.

*Prerequisite(s):* Junior or Senior status in Criminal Justice Adult Undergraduate and FORSC-4050.

#### FORSC 4070 Criminal Law and the Law of Evidence (3 hours)

In the course, the elements of violent crimes will be reviewed, as well as criminal procedure, constitutional and statutory limitations of criminal investigation, and the Fourth, Fifth, and Sixth Amendments. The requirements of conviction, or burden of proof (criminal vs. civil standards), and rules and policies pertaining to evidence will be studied.

*Prerequisite(s):* Junior or Senior status in the Criminal Justice Adult Undergraduate Program.

#### FORSC 4080 Medicolegal Death Investigation (3 hours)

This course provides an overview of death investigation. The specialties of forensic pathology, forensic odontology, forensic anthropology, and forensic entomology are introduced and the expectations of the death investigator regarding the specialist outlined. Forensic science technique related to identifying the victim(s), establishing time of death, cause and manner of death, postmortem interval, and presumptive and confirmed identifications are presented.

*Prerequisite(s):* Junior or Senior status in the Criminal Justice Adult Undergraduate Program.

#### FORSC 4100 Research Methods and Statistics (3 hours)

The intent of this course is to introduce the students to the basics of statistics and research design. With respect to design issues, special attention will be paid to the "rules of evidence" for the analysis of cause-and-effect relationships and the important differences among experimental, quasi-experimental, and concomitant measurement studies. With respect to data analytic issues, primary attention will be given to the family of least-squares techniques that includes analysis of variance and multiple

linear regression. Emphasis will be on the pragmatics of hypothesis testing, data analysis, and the communication of findings.

**FORSC 4560 Photography as Documentation (3 hours)**

This class is an introduction to the basic theory of digital photography and imaging as documentation. Students will learn how to use and control a digital SLR camera, flash, studio lights and other techniques to produce images. The computer and imaging software will be used to generate images for print and electronic display. Subject matter, form and content will also be emphasized in the production of images. The course also includes specific emphasis accurately describing and presenting a scene or details visually and verbally.

**FORSC 4600 Trace and DNA Evidence (1 hour)**

See department for course description

**FORSC 4610 Fire Scene Investigations (1 hour)**

See department for course description

**FORSC 4620 Crime Scene Imaging (1 hour)**

As film cameras become extinct, effective digital imaging is an ever-important skill set to develop. This class introduces students to court-approved techniques for digital imaging enhancements of crime scene photography utilizing Adobe Photoshop. The students take an image from a crime scene or lab analysis, then enhance or clarify the image, and will be able to explain how and why that clarification was compelled without altering the image. They are given several examples and are expected to enhance those images with little or no guidance after the lecture. The students are then tested on knowledge gained through lecture and the practical exercise.

**FORSC 4630 Specialized Photography (1 hour)**

See department for course description

**FORSC 4640 Ballistics: Trajectory Analysis (1 hour)**

See department for course description

**FORSC 4650 Lab Analysis Firearm Evidence (1 hour)**

See department for course description

**FORSC 4660 Toolmark Evidence Recognition, Recovery and Examination (1 hour)**

See department for course description

**FORSC 4680 Shooting Incident Reconstruction (1 hour)**

Shooting scenes are commonly encountered by the Crime Scene Investigator and the ability to provide a proper trajectory analysis is crucial for a reconstruction of events. Trajectory analysis relies on the basic premise that bullets travel in a straight line (where gravity is not taken into account) and thus their flight path can be reconstructed by examining the objects that the projectiles impact. The class will be comprised of a lecture and test as well as a practical exercise.

**FORSC 4700 Interview: Child Victims and Witnesses (1 hour)**

See department for course description

**FORSC 4710 Adjudicative Competencies (1 hour)**

See department for course description

**FORSC 4720 Risk Assessment (1 hour)**

See department for course description

**FORSC 4730 Sexual Offense Behaviors (1 hour)**

See department for course description

**FORSC 4740 Threat Assessment (1 hour)**

Threat assessment refers to the determination of risk posed by individuals or groups against specified targets or institutions. The course examines the types of threats commonly encountered in law enforcement situations and the characteristics of approach (i.e., individuals likely to engage in threatening or disruptive face-to-face contact) vs. non-approach situations. The course examines the information used to process these risk determinations. The course will also examine the way we view and perceive threats including stalking, workplace, and school violence.

#### FORSC 4750 Interviewing (1 hour)

See department for course description

#### FORSC 4760 Statement Analysis (1 hour)

See department for course description

#### FORSC 4770 Expert Witness Testimony (1 hour)

This course focuses on preparing the student to act as an expert witness in a civil or criminal trial. Expert witnesses are called to testify due to their expertise and experience in a specific subject, such as DNA analysis, scene investigation, psychology, or many other fields. Many of these subjects can be difficult to present to a lay audience, such as a jury, in a limited amount of time. This course will show students how to best prepare in order to present themselves, their credentials, and their testimony in a professional manner, and how to anticipate questions from opposing council. The students will be given preparation techniques, familiarization with trial procedures, and will participate in a mock trial exercise.

#### FORSC 4780 Adolescent and Juvenile Justice (1 hour)

Students will review the developmental (cognitive, physical, emotional, maturational) components of adolescent development, and how these intersect with the juvenile justice system. Discussion will focus on juvenile-specific issues related to adjudication as juvenile (vs. adult), competency related to adjudication, risk assessment, treatment, and management. Recent changes in child welfare strategies, court rulings, and public policy issues will also be presented.

#### FORSC 5780 Adolescent and Juvenile Justice (1 hour)

Students will review the developmental (cognitive, physical, emotional, maturational) components of adolescent development, and how these intersect with the juvenile justice system. Discussion will focus on juvenile-specific issues related to adjudication as juvenile (vs. adult), competency related to adjudication, risk assessment, treatment, and management. Recent changes in child welfare strategies, court rulings, and public policy issues will also be presented.