

# **FORENSIC SCIENCE LAB (FRSZ)**

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## **FRSZ 391. Topics in Forensic Science Laboratory. 1-3 Hours.**

Semester course; 3-9 laboratory hours. 1-3 credits. A maximum total of six credits for all forensic science topics courses may be applied to the major. Prerequisite: FRSC 300 with a minimum grade of C. Laboratory investigations in a selected topic in forensic science. See the Schedule of Classes for specific topics to be offered each semester and additional prerequisites.

## **FRSZ 438. Forensic Molecular Biology Laboratory. 2 Hours.**

Semester course; 4 laboratory hours. 2 credits. Pre- or corequisite: BIOL/FRSC 438. Provides comprehensive coverage of the various types of DNA testing currently used in forensic science laboratories. Students will have hands-on experience with the analytical equipment employed in forensic science laboratories and the techniques for human identification in forensic casework. Students also will explore and practice both scientific writing and writing of DNA case reports. Crosslisted as: BIOZ 438.

## **FRSZ 671. Instrumentation in Forensic Chemistry Laboratory. 1 Hour.**

Semester course; 3 laboratory hours. 1 credit. Corequisite: FRSC 671. Enrollment is restricted to students in the forensic science program. Applications of chromatography, mass spectrometry and spectroscopy as used in modern crime laboratories. Instruction will focus on instrumental analysis as applied to drug analysis, toxicology, fire debris identification and general trace evidence examination. Laboratory exercises will focus on core instruments used across multiple subdisciplines in forensic chemistry.

## **FRSZ 673. Forensic Microscopy Laboratory. 1 Hour.**

Semester course; 3 laboratory hours. 1 credit. Establishes the foundation for the application and methodology of microscopy. The knowledge acquired in this course can be applied to forensic disciplines such as firearms examinations, forensic biology, controlled substances, questioned documents and trace evidence. The course consists of laboratory exercises and demonstrations.

## **FRSZ 675. Forensic Serology and DNA Analysis Laboratory. 1 Hour.**

Semester course; 3 laboratory hours. 1 credit. Presents the chemical, immunological and microscopic laboratory techniques commonly used for the examination and identification of body fluid stains and determination of species. Provides working knowledge and hands-on practice with basic forensic DNA procedures, including DNA extractions, quantitation, PCR amplification analysis/genotyping. Instruction focuses on molecular biology techniques as applied in a forensic DNA laboratory.

## **FRSZ 792. Research Techniques. 1 Hour.**

Semester course; 3 laboratory hours. 1 credit. Enrollment restricted to students with graduate standing in forensic science and permission of faculty mentor. Application of basic laboratory methods used in forensic science to the investigation of topics of interest. Emphasis on experimental design, data collection and analysis, communication skills, and critical thinking. Graded as Pass/Fail.