

FORENSIC SCIENCES (FRNS)

FRNS 5000 Thesis Research & Seminar

Prerequisites: Consent of major adviser.

Description: Research, thesis, and seminar requirement culminating with a master's thesis and degree. Offered for variable credit, 1-15 credit hours, maximum of 15 credit hours.

Credit hours: 1-15

Contact hours: Other: 1

Levels: Graduate

Schedule types: Independent Study

Department/School: Forensic Sciences

FRNS 5013 Survey of Forensic Sciences

Prerequisites: Consent of instructor.

Description: Predominantly online class providing overview of various forensic sciences and how they relate to presentation of evidence and to civil and criminal procedures involved in solving problems of law. Law and ethics, forensic pathology, forensic dentistry and anthropology, forensic toxicology and molecular biology (DNA), forensic nursing and death scene investigation, forensic psychology, criminalistics, questioned documents, forensic engineering and technology, forensic accounting, and management techniques in forensic sciences. A review of current guidelines for knowledge, procedures, quality assurance and control, and certification/accreditation from national standards boards and scientific and technical working groups.

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5023 Questioned Document Examination

Prerequisites: FRNS 5013 or concurrent enrollment.

Description: Functions of questioned document examiners, beyond document analysis to relating services and issues. History of questioned documents, handwriting and handprinting, process for obtaining exemplars, types of document examination (e.g., typewriting, mechanical processes, indented writing, obliterated writing, inks, currency, erasures, physical matches, and post marks.) Collection and preservation of evidence as well as courtroom procedures. (This course does not train the student as a document examiner and in no way certifies or qualifies the student to conduct questioned document analysis at the conclusion of this course.)

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5033 Theory and Practice of Forensic Handwriting Examination

Prerequisites: FRNS 5023.

Description: Theoretical and practical aspects of handwriting as forensic evidence. Production of normal and false handwriting, variables in handwriting production, standards of comparison, identification theories, examination methodologies, expression of conclusions, characterization and validation of examiner skills, legal admissibility of handwriting expertise, and challenges to professional practice.

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5043 Technical Aspects of Forensic Document Examination

Prerequisites: FRNS 5023.

Description: Basic theory in visual examination of questioned documents. Visual and color theory, measuring tools, instruments, simple microscopy, and photographic techniques. Technical description, theory, operation and practical use of various instrumentation used in the field such as the Electrostatic Detection Apparatus (ESDA) and Video Spectral Comparator (VSC).

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5053 The Historical Aspects of Forensic Document Examination

Prerequisites: Graduate standing.

Description: This course presents historical aspects of forensic document examination. It covers development of handwriting, the acceptance of document examination expertise in Britain and North American, the early luminaries and famous cases.

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5063 Ethical Research and Scientific Writing

Prerequisites: Permission from research advisor.

Description: Develops knowledge and skills for ethical scientific research, writing and presentation. Covers responsible conduct, organization and design of research around a scientific question, and writing problems specific to science and the individual. Advisor guidance on some assignments required.

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5073 Quality Assurance in Forensic Science**Prerequisites:** Admission to program.**Description:** Preparation for the forensic scientist to develop and implement quality assurance and quality control procedures to ensure the excellence of a laboratory. Preparation of laboratory procedures and policies, use of appropriate standards and controls, and validation methods for establishing an effective quality assurance program in the laboratory.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Forensic Sciences**FRNS 5083 Ethics in Forensic Leadership****Description:** Focuses on leadership development for managers of forensic organizations, including examination of leadership and ethics theories, application to theories to problems in forensic settings, tasks and relational skills for developing effective teams and groups within an ethical framework.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Forensic Sciences**FRNS 5090 Internship in Forensic Sciences****Prerequisites:** FRNS 5073.**Description:** initial course in chosen specialty, permission of advisor and program director, and letter of agreement or contract with designated facility or laboratory. Provides practical training and experience within a work or laboratory setting under the guidance of a designated supervisor. This experience should complement graduate studies in the forensic sciences and support related career goals. Note: requires four hours per week at internship site for each credit hour of enrollment; eight hours per credit for summer session. Offered for variable credit, 1-3 credit hours, maximum of 3 credit hours.**Credit hours:** 1-3**Contact hours:** Other: 1**Levels:** Graduate**Schedule types:** Independent Study**Department/School:** Forensic Sciences**FRNS 5103 The Chemistry of Pyrotechnics****Prerequisites:** Permission of instructor and faculty advisor.**Description:** Provide students with a fundamental knowledge of the chemistry of pyrotechnics/low explosives intended to function as propellants, or generate pyrotechnic effects such as light, heat, sound, smoke and color. Emphasizes chemical and thermodynamic principles required to formulate these compositions and which determine their performance.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Forensic Sciences**FRNS 5113 The Chemistry of Explosives****Prerequisites:** Permission of Instructor and Faculty Advisor.**Description:** Provides a fundamental knowledge of the chemistry of energetic materials. Included will be low explosives that are intended to function as propellants, or generate pyrotechnic effects such as light, heat, sound and color. Emphasizes chemical and thermodynamic principles required to formulate these compositions and which determine their performance. Examines the chemistry of high explosives and high explosive formulations, and their effects will be examined.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Forensic Sciences**FRNS 5123 Fire Dynamics in Forensic Investigations****Prerequisites:** Permission from Instructor and Faculty Advisor.**Description:** Teaches the fundamentals of how chemistry, fire science, fluid mechanics and heat transfer interact to influence fire behavior.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Forensic Sciences**FRNS 5133 Ordnance Identification and Recognition****Prerequisites:** Permission from Instructor and Faculty Advisor.**Description:** Provides the fundamentals of a practical deductive process used to identify unknown military ordnance and addresses the safety precautions that should be applied in order to minimize associated hazards.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Forensic Sciences**FRNS 5143 Methods in Fire and Explosion Investigation NFPA 921/1033****Prerequisites:** Permission from Instructor and Faculty Advisor.**Description:** Surveys investigative methods in fire and explosion including legal considerations, fire science, building construction, origin determination, interviewing, documenting, evidence collection, deaths and injuries and other emerging trends in scientific testing and research.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Forensic Sciences**FRNS 5153 Explosives Research, Testing and Evaluation Methods****Prerequisites:** Permission from Instructor and Faculty Advisor.**Description:** Explores explosives characterization methods and explosives range testing methods to include how to develop and document a test plan, test methods and instrumentation while documenting and writing results.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Forensic Sciences

FRNS 5163 Advanced Fire Dynamics

Prerequisites: FRNS 5123 and permission of instructor and Faculty Advisor.

Description: Advanced fire dynamics will reinforce and expand upon the fundamentals of fire dynamics learned in the prerequisite class. This course will cover advanced concepts in Fire Dynamics, including ventilation effects and application of fire dynamics principles to real-world fire investigations.

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5173 Advanced Explosion Investigation

Prerequisites: Permission from Instructor and Faculty Advisor.

Description: Demonstrates a systematic method of investigating an explosion scene. Provides instruction in explosives identification, applications, effects, fragmentation analysis, IED component recognition and evidence collection, including DNA.

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5183 Computer Fire Modeling

Prerequisites: Permission of Instructor and faculty advisor.

Description: Teaches the fundamentals of computational fluid dynamics (CFD) computer fire modeling, using Fire Dynamics Simulator (FDS). Covers topics such as basic conservation equations; Cartesian coordinate systems; use of spreadsheets to facilitate the creation of fire models; how to install and run FDS; how to write the code required to create an FDS model; techniques for modeling fire scenes and verification/validation of fire modeling use.

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5193 Advanced Computer Fire Modeling

Prerequisites: Permission of instructor and faculty advisor; FRNS 5183 Basic Computer Fire Modeling.

Description: Focuses on the creation and usage of fire models to assist with fire investigations. Topics include advanced meshing techniques; modeling of wind and other ventilation sources; using model output to diagnose problem areas; how to conduct sensitivity analysis of computer fire model results and discussion of use of fire models in the support of investigations and trials.

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5213 Molecular Biology for the Forensic Scientist

Prerequisites: Admission to the program.

Description: Develops a solid foundation of knowledge in molecular biology for understanding the concepts of genetic marker analysis, especially DNA typing. Course previously offered as FRNS 5233.

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5242 Population Genetics for the Forensic Scientist

Prerequisites: FRNS 5513.

Description: Population genetics relevant to DNA analysis technologies to identify perpetrators of crime. Includes foundation of statistical knowledge in forensic DNA analysis and family relatedness testing, history and application of statistical and population genetic theory to assigning weight to matches in DNA profiles for the court.

Credit hours: 2

Contact hours: Lecture: 2

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5282 Methods in Forensic Sciences

Prerequisites: Permission of instructor.

Description: Advanced-level laboratory course in which students apply knowledge from earlier course work in a hands-on setting and employ fundamental techniques and methods related to forensic biology, forensic microbiology, forensic pathology, and forensic toxicology. Course previously offered as FRNS 5281.

Credit hours: 2

Contact hours: Lecture: 2

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5323 Forensic Microbiology

Prerequisites: Permission of instructor and basic microbiology recommended.

Description: Basic microbiologic techniques applied to actual forensic situations. Includes rules of evidence applied to investigations with suspected use of microorganisms as bioterrorism agents. Stresses recognition of biological agents, site sampling, and laboratory identification.

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5413 Forensic Pathology and Medicine**Prerequisites:** Consent of instructor.**Description:** Medico-legal investigation of death and injury due to natural causes, accidents and violence. Transportation injuries, homicides, suicides, blunt- or sharp-force injuries, gunshot wounds, asphyxia, drowning, and thermal and electrical injuries. Pediatric deaths; rape investigation; injury analysis; interpretive toxicology; identification by dental means; anthropologic studies for determining age, sex and race; and conducting of independent medical examinations. Demonstrations and data analysis from actual cases. Review of current guidelines for knowledge, procedures, quality control/assurance, and certification/accreditation from national standards boards and scientific/technical working groups.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Forensic Sciences**FRNS 5422 Forensic Osteology and Anthropology****Prerequisites:** Current graduate student status; Graduate student in Pathology: Death Scene Investigator with completion of FRNS 5013, FRNS 5653 and FRNS 5431; or permission of the course coordinator.**Description:** Osteology portion introduces anatomical features of bones that comprise the axial and appendicular components of the human skeleton and also considers histological structure and types of bone formation. Anthropology portion offers overview of methods for skeletal identification and trauma analysis. Laboratory session includes work with skeletal material and participation in an excavation.**Credit hours:** 2**Contact hours:** Lecture: 1 Lab: 2**Levels:** Graduate**Schedule types:** Lab, Lecture, Combined lecture and lab**Department/School:** Forensic Sciences**FRNS 5423 Blast Injuries and Effects****Prerequisites:** Permission of instructor and faculty advisor.**Description:** Takes a comprehensive view into the nuances of explosive effects on the human body. Specifically scrutinized will be primary, secondary, tertiary, and quaternary blasts effects on lungs, the cardiovascular system, neurological functions, integumentary systems, long bone extremities, otic, ophthalmic, and psychological. Provides students the opportunity to research a focus area of interest related to casualties of explosive events.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Forensic Sciences**FRNS 5513 Forensic Bioscience****Prerequisites:** FRNS 5013; college-level chemistry and biology.**Description:** Concepts of toxicology and identity testing, the two areas representing the most extensive application of the fields of chemistry, biology and genetics to forensic science. History, theory, application and quality assurance concepts to the material. Working knowledge of how toxic compounds affect human physiology and how they are identified in the laboratory. Basic concepts in genetics and their application to tracing origin of biological samples in civil or criminal investigations as well as resolving disputed family relationships.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Forensic Sciences**FRNS 5523 Forensic Toxicology****Description:** Introduction of fundamental aspects of forensic toxicology and emphasis on major subfields of postmortem forensic toxicology, human performance toxicology and forensic drug testing. Examination of methodologies and analyses associated with these three major subfields.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Forensic Sciences**FRNS 5533 Drug Toxicity****Description:** Introduces fundamental aspects of abused drugs from a toxicological perspective and examines major disciplines of toxicology. Also covers basic principles of toxicology applied to different classes of commonly abused drugs.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Forensic Sciences**FRNS 5543 Advanced Forensic Toxicology****Prerequisites:** FRNS 5523.**Description:** Familiarizes the student with advanced aspects of forensic toxicology in view of current forensic toxicological trends. Covers risk assessment principles, factors in pharmacokinetics, weapons of mass destruction, and integrating concepts with current applications.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Forensic Sciences**FRNS 5613 Criminalistics and Evidence Analysis****Prerequisites:** Admission to program.**Description:** Introduction to techniques and tools used for crime scene investigations and analysis of evidence. Introduction to the forensic laboratory, its operation and function, forensically applied scientific concepts, analytical instrumentation and microscopy, and documentation, collection and preservation of physical evidence. Review of FBI-sanctioned working group guidelines for evidence gathering, evidence handling, quality control and accreditation.**Credit hours:** 3**Contact hours:** Lecture: 3**Levels:** Graduate**Schedule types:** Lecture**Department/School:** Forensic Sciences

FRNS 5622 Advanced Criminalistics

Prerequisites: FRNS 5073, FRNS 5613, FRNS 5653 and basic course work in specialty.

Description: Application of strategies/techniques for effective crime scene investigation in laboratory or mock crime scene setting. Covers the duties of the first officer at the crime scene, the crime scene investigator/evidence collector, and analysis of evidence in the forensic laboratory. Builds on concepts from prerequisite courses for hands-on exercises.

Credit hours: 2

Contact hours: Lab: 4

Levels: Graduate

Schedule types: Lab

Department/School: Forensic Sciences

FRNS 5653 The Law and Expert Evidence

Prerequisites: Admission to program.

Description: Review of ways that the law, particularly the law of evidence, affects the work of the forensic scientist. The beginning of the case, most often the crime scene, through the legal process, through trial and including appeals and motions for a new trial. Legal doctrines of interest to the forensic scientist, such as chain of custody, work product privileges, laying of the proper foundation, exhibits, and the standards necessary to obtain a new trial.

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5663 Destructive Devices/Explosives: Law and Regulations

Prerequisites: Permission of instructor and faculty advisor.

Description: Involves a survey of the legal principles relevant to explosives and arson, including caselaw, statutes, and regulations.

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5673 Intelligence for Forensic Investigators

Prerequisites: Permission of instructor and faculty advisor.

Description: Provides an overview on the U.S. Intelligence Community, domestic intelligence, and information sharing processes. The courses also provides researchers an opportunity to explore open source intelligence as well as use unclassified U.S. reporting databases. Finally, researchers are provided the opportunity to investigate recent terrorist bombing events in additional to domestic and international terrorist literature.

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5713 Forensic Psychology

Prerequisites: Consent of faculty.

Description: Introduction to the relationship between the disciplines of law and psychology via examination and contrast of the issues at the interface of both disciplines. Various legal terminology that calls for psychological input; legal and ethical responsibilities of forensic psychologists, criminal behavior, punishment and deterrence, violence and mental illness, competency to stand trial, the insanity defense, eyewitness testimony, the death penalty, and polygraph testing. Exploration of the role of legal and mental health systems in social control, impact of psychological knowledge on functioning of the legal system. Examination of psychological topics and paradigms relevant to study of particular legal subsystems or topics.

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5723 Advanced Forensic Psychology

Prerequisites: FRNS 5013 & FRNS 5713.

Description: Expands on topics covered in FRNS 5713. Covers function of the mental health professional in criminal cases, nature and impact of mental illness on individual life and freedom, reasons behind crimes, gender differences in the criminal justice system, and laws pertinent for mental health professionals.

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5733 Forensic Victimology

Prerequisites: FRNS 5013 or permission of instructor.

Description: Introduction to victimology, emphasizing victims' issues within the justice system and in medico-legal investigations. Explores impact of crime on victim; correlation between types of victims; crime and offender categories; risk factors; victim-offender and victim-society relationships; the role of victimologist as a researcher and consultant; influences of media, law enforcement, advocacy groups, businesses, and social movements.

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5743 Seminar in Forensic Psychology

Prerequisites: Permission of Instructor.

Description: Capstone seminar course for all subspecialty tracks in forensic psychology. Builds upon prior coursework to prepare student for comprehensive final examinations in area of specialization and provide a theoretical background suitable for research leading to publication, presentation, or a thesis or dissertation.

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5753 Criminal Profiling

Prerequisites: Current graduate student status or approval of instructor.

Description: Combines various academic disciplines toward a behavioral examination of the violent criminal offender. By examining the crime scene from a behavioral perspective, the psychodynamics of the offender, the sociological environmental forces, and the social psychological dimensions of the victim-offender interactions are combined for a more holistic understanding of the violent offender.

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5813 Building Construction and Fire/Explosion Forensic Examination

Prerequisites: Permission of instructor and faculty advisor.

Description: Provides an introduction to building construction. It will focus on the importance of building construction as applied to fire and explosion investigations. Topics will include: structural mechanics, building construction concepts, properties of building materials, building and fire codes, fire and explosion behavior as it relates to building construction, fire protection features, various building types, as well as structural collapse and safety considerations.

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5823 Forensic Examination of Fire Protection Systems

Prerequisites: Permission of instructor and faculty advisor.

Description: Teaches the basic components and functions of building fire protection systems such as fire alarms and suppression systems. An emphasis will be placed on how these systems can impact the spread of a fire and how information from these systems can be used to assist with an origin and cause investigations. Common modes of system failures will also be covered. This is a self-paced three- (3) credit course.

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5833 Identification of Destructive Device Fuzing Systems

Prerequisites: Permission of instructor and faculty advisor.

Description: Expands students' knowledge of destructive device fuzing systems and forensic exams of these systems. Focuses on the mechanical, chemical, and electrical fuzing systems of the destructive devices.

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5843 Advanced Destructive Device Circuit Exploitation

Prerequisites: Permission of instructor and faculty advisor; FRNS 5833 Basic Identification of Destructive Device Fuzing Systems.

Description: Examines electro-mechanical IED designs that are found on the open-source Internet. Examines electro-mechanical initiator circuitry from the perspective of forensics. Examines initiator circuit families such as: Timers, Pressure Sensitive, Radio Controlled, etc.

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5853 Electrical Theory and Failure Analysis in Forensic Fire Investigations

Prerequisites: Permission of instructor and faculty advisor.

Description: Teaches basic electricity and basic electrical failure analysis familiarizing with how electricity, electrical appliances, and electrical devices can be potential ignition sources in a fire. Topics include electrical theory, electrical wiring techniques, circuit protection, appliance protection, identification of electrical melting on conductors, scene investigation methodology, current research topics, and NFPA 921 considerations.

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5863 Advanced Electrical Theory and Failure Analysis in Forensic Fire Investigations

Prerequisites: Permission of instructor and faculty advisor; FRNS 5853 Basic Electrical Theory and Failure in Forensic Fire Investigations.

Description: Provides the student with a more advanced understanding of electricity, energy, and power. Allows the ability to comprehend electrical failures and explain them to a jury.

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5913 Forensic Accounting and Fraud Investigation

Prerequisites: FRNS 5013.

Description: Introduction of concepts and tools used in the fields of forensic accounting and financial fraud investigations. Issues of alter ego, constructive trusts, fraudulent conveyances, accounting liability, business valuations, lost profits, damages, marital dissolution issues and bankruptcy. Aspects of fraud investigation, including overview of fraud in U.S., types and methods of fraud perpetration, red flags of fraud perpetrators, money laundering, and international fraud investigations. (Upon completion student will have an understanding of accounting methods used in a litigation services/fraud investigation environment and knowledge of basic requirements for drafting expert reports in accordance with Federal Rules of Civil Procedure.)

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5943 Forensic Management and Organizational Development

Prerequisites: FRNS 5013.

Description: Application of managerial and organizational leadership skills to the demands of forensic sciences, including attention to the human resource, relations and development issues. Inter-agency cooperation, quality control and assurance, certification and accreditation issues, and internal security.

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5960 Forensic Problem Solving through Applied Research

Prerequisites: Permission from instructor and faculty advisor.

Description: Examines mixed research methodologies and designs applicable to the forensic sciences. The course launches work toward a thesis or creative component, including development of a purpose statement, research question and/or hypothesis as well as construction of an introduction and literature review. Offered for variable credit, 1-3 credit hours, maximum of 3 credit hours.

Credit hours: 1-3

Contact hours: Lecture: 1

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5963 Forensic Statistics

Prerequisites: Permission of instructor and faculty advisor.

Description: Surveys statistical methodology relevant to forensic scientists. Provides a basic understanding of statistics presented in recent forensic literature. Hypothesis testing, ANOVA techniques, regression, categorical techniques.

Credit hours: 3

Contact hours: Lecture: 3

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5970 Directed Readings in Forensic Sciences

Prerequisites: Permission of instructor and faculty adviser.

Description: Provides guided reading under direction and supervision of the instructor; in-depth, independent study on an identified topic relative to forensic sciences. Offered for variable credit, 1-3 credit hours, maximum of 3 credit hours.

Credit hours: 1-3

Contact hours: Lecture: 1

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5980 Non-Thesis Creative Component in Forensic Sciences

Prerequisites: Permission of instructor and faculty adviser; FRNS 5063 (concurrent enrollment allowed).

Description: Provides final-semester capstone experience for the non-thesis graduate student through independent research or projection management. Culminates with presentation of results in writing and in a public forum, which may be via electronic delivery or in person. Offered for variable credit, 1-3 credit hours, maximum of 3 credit hours.

Credit hours: 1-3

Contact hours: Lecture: 1

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences

FRNS 5990 Special Topics in Forensic Sciences

Prerequisites: Permission of instructor and faculty adviser.

Description: Provides for exploration on special topics in the forensic sciences. Students gain an understanding at an advanced level of the particular topic presented. Offered for variable credit, 1-3 credit hours, maximum of 15 credit hours.

Credit hours: 1-3

Contact hours: Lecture: 1

Levels: Graduate

Schedule types: Lecture

Department/School: Forensic Sciences