FIVS - FORENSIC & INV SCIENCE (FIVS)

FIVS 101 Introduction to Academic Success in Forensic and Investigative Sciences
Credit 1. 1 Lecture Hour.
Orientation to academic success within higher education and specifically
the Bachelor of Science degree in forensic and investigative sciences;
awareness of academic and campus support services available for
student success; development of goals for academic and career planning,
including creation and utilization of degree planner; awareness of
personal self-management strategies, including learning styles, time
management, goal setting, stress management, and development of
personal strategies for implementation of personal self-management into
practice.

FIVS 102 Continuing Academic Success in Forensic and Investigative Sciences
Credits 0. 0 Lecture Hours. 0 Lab Hours. 0 Other Hours.
Continued exploration to academic success within higher education and
specifically the Bachelor of Science degree in Forensic and Investigative
Sciences; increase awareness of academic and campus support services
available for student success; develop goals for academic and career
planning, including creation and utilization of degree planner; awareness of
personal self-management strategies, including learning styles, time
management, goal setting, stress management, and development of
personal strategies for implementation of personal self-management into
practice. Must be taken on a satisfactory/unsatisfactory basis.
Prerequisite: Grade of C or better in FIVS 101.

FIVS 123 Forensic Investigations
Credits 3. 3 Lecture Hours.
Overview of forensics from incident scene to court room verdict;
principles, concepts, tools and methodologies used in the science
and practice of forensics; examination of various forensic fields;
evidence recognition, analysis, interpretation and presentation to diverse
audiences.

FIVS 205 Introduction to Forensic and Investigative Sciences
Credits 3. 3 Lecture Hours.
Overview of principles, procedures, and concepts of forensic and
investigative sciences; instruction in the definitions, scope, and use of
tools, techniques and protocols in forensic applications used to resolve
social, regulatory, and legal disputes.
Prerequisite: Freshman or sophomore classification or approval of
instructor.

FIVS 210 Forensic Photography
Credits 2. 1 Lecture Hour. 2 Lab Hours.
Identification and application of techniques of the practice of
photography as applied to forensics.
Prerequisite: Grade of C or better in FIVS 205; FIVL or FIVS major.

FIVS 215 Forensic Microscopy
Credits 2. 1 Lecture Hour. 2 Lab Hours.
Identification and application of techniques of the practice of microscopy
as applied to forensics.
Prerequisite: Grade of C or better in FIVS 205; FIVL or FIVS major.

FIVS 220 Impression Evidence
Credits 2. 1 Lecture Hour. 2 Lab Hours.
Individual and class characteristics of footwear, tire track, impression
evidence documentation, collection, test impression techniques, shoe
and tire tread designs, sizing, manufacturing, wear characteristics,
comparison techniques, courtroom preparation and testimony.
Prerequisites: Grade of C or better in FIVS 205; FIVL or FIVS majors.

FIVS 285 Directed Studies
Credits 0 to 4. 0 to 4 Other Hours.
Directed individual study in forensic and investigative sciences. May be
repeated for credit.
Prerequisites: Freshman or sophomore classification; approval of
instructor and department head.

FIVS 289 Special Topics in...
Credits 1 to 4. 1 to 4 Lecture Hours. 0 to 4 Lab Hours.
Selected topics in an identified area of forensic and investigative
sciences. May be repeated for credit.

FIVS 291 Research
Credits 0 to 4. 0 to 12 Lab Hours.
Research conducted under the direction of a faculty member in the
department of entomology. May be repeated 3 times for credit.
Prerequisite: Freshman or sophomore classification.

FIVS 308 Forensic Implications of Inheritance
Credits 4. 3 Lecture Hours. 3 Lab Hours.
Forensic genetics with an emphasis on human molecular genetics,
population genetics, and genetic application in the forensic sciences.
Prerequisites: Grade of C or better in BIOL 112; upper division in forensic
and investigative sciences; junior or senior classification.

FIVS 316 Biotechnology and Forensics
Credits 4. 3 Lecture Hours. 3 Lab Hours.
Illustration of the use of a variety of biotechnology methods for forensic
applications; appreciation and understanding of the underlying molecular
biology techniques that are used in a diverse array of settings including
blood analysis, blood typing, DNA fingerprinting and genetic testing;
potential future use of advanced sequencing technologies for forensic
applications; consideration of social, ethical and legal implications of
these procedures and applications.
Prerequisites: Grade of C or better in FIVS 308.

FIVS 401/SCSC 401 Forensic Soil Science
Credits 3. 2 Lecture Hours. 2 Lab Hours.
Examination of soils biology, chemistry and physical attributes to solve
crimes; soil and geologic characteristics associated with crime scene
examination; physical, biological and chemical characteristics and use of
trace evidence.
Prerequisite: Grade of C or better in FIVS 482.
Cross Listing: SCSC 401/FIVS 401.

FIVS 405/CYBR 405 Applied Digital Forensics and Incident Response
Credits 3. 3 Lecture Hours.
Collection of digital evidence; digital evidence analytics; analysis of log
data; malware triage; recover damaged digital evidence; write technical
reports on malware and incidents; legal and ethical components of digital
forensic science.
Prerequisites: Junior or senior classification.
Cross Listing: CYBR 405.
FIVS 415 Practice and Principles of Science and Law  
Credits 3. 3 Lecture Hours.  
Introduction to series of practitioners of forensic science and the justice system; receive instruction on principles, procedures, and practices used in solving legal and societal issues; examine scientific method and scientific knowledge as applied through expert testimony; enhance critical thinking and reasoning skills in studying and debating different positions of current issues of science and law.  
Prerequisites: Grade of C or better in FIVS 205 and FIVS 481; grade of C or better in FIVS 431/ENTO 431, FIVS 432/ENTO 432, and FIVS 435, or concurrent enrollment.

FIVS 420 Controlled Substances  
Credits 2. 2 Lecture Hours.  
Classification of effects of controlled substances in impaired individuals, sampling procedures and presumptive testing; history of the controlled substances act of 1970, federal drug scheduling, penalty groups in Texas, legislative complexity and challenges with new psychoactive substances, physiological, sociological, legal and societal aspects of controlled substance abuse.  
Prerequisite: Grade of C or better in FIVS 308.

FIVS 421 Latent Print Processing  
Credits 2. 1 Lecture Hour. 3 Lab Hours.  
Information, techniques, and methodologies for processing latent fingerprints and enhancing visible fingerprints at and from crime scenes, as well as from physical evidence.  
Prerequisites: Grade of C or better in FIVS 205 and FIVS 422; upper division forensic and investigative sciences academic standing; approval of instructor.

FIVS 422 Crime Scene Investigation  
Credits 2. 2 Lecture Hours. 3 Lab Hours.  
Principles, procedures, processes and hands-on experience for conducting investigations ranging from general crime scene to death investigations.  
Prerequisites: Grade of C or better in FIVS 205 and FIVS 482, upper division forensic and investigative sciences academic standing.

FIVS 431/ENTO 431 The Science of Forensic Entomology  
Credits 3. 3 Lecture Hours.  
Explores the science, methodology and technology employed to gather, preserve and present information about insects and other arthropods in such a manner that this information can be used in courts of law as evidence and testimony to help resolve issues of a criminal or civil nature.  
Prerequisites: Junior or senior classification or approval of instructor.  
Cross Listing: ENTO 431/FIVS 431.

FIVS 432/ENTO 432 Applied Forensic Entomology  
Credit 1. 3 Lab Hours.  
Laboratory-based offering practical experience using scientific information, methodology, technology, and legal procedures inherent to the field of forensic entomology; emphasis on collecting, preserving, and identifying information as evidence and expert witness testimony in courts of law.  
Prerequisites: Junior or senior classification or approval of instructor.  
Cross Listing: ENTO 432/FIVS 432.

FIVS 435 Case Studies in Problem Solving  
Credits 3. 3 Lecture Hours.  
Development of reasoning strategies by examining a variety of case studies; science and scientific method solving real-world problems as part of an investigative team.  
Prerequisites: Grade of C or better in FIVS 316 and FIVS 481; grade of C or better in FIVS 415 or concurrent enrollment; senior classification or approval of instructor.

FIVS 440 Forensic Communications  
Credit 1. 1 Lecture Hour.  
Scientific writing and communication, critical thinking, reading, research, writing and oral skills.  
Prerequisite: Grade of C or better in FIVS 308.

FIVS 481 Seminar  
Credit 1. 1 Other Hour.  
Analysis of research topics related to the fields of forensic science and law. May be taken 4 times for credit.  
Prerequisite: Grade of C or better in FIVS 482.

FIVS 482 Occupational and Professional Development  
Credits 2. 2 Lecture Hours.  
Organized instruction in written and oral communication; acquaint students with private and public-sector companies and agencies as well as leading professionals from these firms to reinforce academic instruction and prepare students for the transition to employment, graduate and professional schools.  
Prerequisite: Entry to upper division of FIVS program; junior or senior classification or approval of instructor.

FIVS 484 Professional Internship  
Credits 0 to 4. 0 to 4 Other Hours.  
Independent study and supervised field experience related to a professional area or interest in forensic science. May be taken 3 times for credit.  
Prerequisite: Junior or senior classification and approval of instructor.

FIVS 485 Directed Studies  
Credits 0 to 4. 0 to 4 Other Hours.  
Directed individual study in forensic and investigative sciences. May be repeated for credit.  
Prerequisites: Junior or senior classification; upper-division FIVS only; approval of instructor and department head.

FIVS 489 Special Topics in...  
Credits 1 to 4. 1 to 4 Lecture Hours. 0 to 4 Lab Hours.  
Selected topics in an identified area of forensic and investigative sciences. May be repeated for credit.

FIVS 491 Research  
Credits 0 to 4. 0 to 12 Lab Hours.  
Research conducted under the direction of a faculty member in the department of entomology. May be repeated 3 times for credit.  
Prerequisite: Junior or senior classification and approval of instructor.