DIVISION: Natural Sciences and Business

COURSE: CRJ 1001 Introduction to Forensic Science

Date: Fall 2022

Credit Hours: 3

Complete all that apply or mark “None” where appropriate:
Prerequisite(s): None

Enrollment by assessment or other measure? ☐ Yes ☒ No
If yes, please describe:

Corequisite(s): None

Pre- or Corequisite(s): CRJ 1000

Consent of Instructor: ☐ Yes ☒ No

Delivery Method: ☒ Lecture 3 Contact Hours (1 contact = 1 credit hour)
☐ Seminar 0 Contact Hours (1 contact = 1 credit hour)
☐ Lab 0 Contact Hours (2-3 contact = 1 credit hour)
☐ Clinical 0 Contact Hours (3 contact = 1 credit hour)
☐ Online
☐ Blended
☐ Virtual Class Meeting (VCM)

Offered: ☒ Fall ☐ Spring ☐ Summer

CATALOG DESCRIPTION and IAI NUMBER (if applicable):
This course examines the field of forensic science. The categories of criminalistics, criminology, psychiatry, dentistry, handwriting, fingerprint comparison, toxicology, serology, and other specialties will be used in this course.
ACCREDITATION STATEMENTS AND COURSE NOTES:
None

COURSE TOPICS AND CONTENT REQUIREMENTS:
Historical development of Forensic Science
The role of the forensic laboratory
Forensic Psychiatry
Scientific evidence in court
Legal medicine and jurisprudence
Bloodstain pattern interpretation
Serology and DNA typing
Forensic odontology
Scope of forensic anthropology

INSTRUCTIONAL METHODS:
Assigned reading
Lecture Case studies
Current events
Classroom discussion
Collaborative group activities
Audio-visual presentations
Student competencies
Class participation
Examinations/quizzes
Written assignments as determined by instructor
Oral presentations as determined by instructor

EVALUATION OF STUDENT ACHIEVEMENT:
A= 90-100
B= 80-89
C= 70-79
D= 60-69
F= 0-59

INSTRUCTIONAL MATERIALS:
Textbooks

Resources
Scholarly academic journal reading assignments in addition to text.
Various educational videos as provided by instructor
Case analysis with past and current cases as they arise

LEARNING OUTCOMES AND GOALS:
Institutional Learning Outcomes
☒ 1) Communication – to communicate effectively;
☒ 2) Inquiry – to apply critical, logical, creative, aesthetic, or quantitative analytical reasoning to formulate a judgement or conclusion;
3) Social Consciousness – to understand what it means to be a socially conscious person, locally and globally;
4) Responsibility – to recognize how personal choices affect self and society.

Course Outcomes and Competencies

Outcome #1: Students will gain an overview of all aspects of forensic science.
Competency 1.1: to identify how various sciences can be applied to the documentation of evidence.
Competency 1.2: discuss forensic evidence and how it can bring a solution to criminal and civil proceedings.
Competency 1.3: discuss the early development of criminal sciences.
Competency 1.4: explain the American development in criminalistics.

Outcome #2: Students will gain an overview of the forensic laboratory.
Competency 2.1: explain the use of physical evidence and scientific science for use in the courtroom.
Competency 2.2: to distinguish the types of physical evidence.
Competency 2.3: discuss the correct documentation and collection of different types of physical evidence.
Competency 2.4: explain the sections of a forensic crime lab and describe each section and their use of identification of evidence.

Outcome #3: Students will be exposed to forensic psychiatry and its application to criminal justice.
Competency 3.1: identify the special training and education needed to achieve the position of a criminalist.
Competency 3.2: discuss the special problems involving forensic psychiatry.
Competency 3.3: understand and outline competency to stand trial and the use of the insanity affirmative defense.

Outcome #4: Students will gain an understanding of the use of scientific evidence in court.
Competency 4.1: identify and recognize the difference between types of evidence: testimony, demonstrative, and physical.
Competency 4.2: discuss the various types of forensic experts, including the training and expertise necessary to qualify as an expert.
Competency 4.3: explain and discuss legal medicine and jurisprudence as it relates to medical-legal issues.

Outcome #5: Students will gain an understanding of forensic pathology.
Competency 5.1: identify and discuss the role of the forensic pathologist.
Competency 5.2: define and discuss the term autopsy, the procedure involved in an autopsy as it relates to a pathologist.
Competency 5.3: explain the procedures taken when doing an actual autopsy.

Outcome #6: Students will gain an overview of forensic toxicology and forensic document examination.
Competency 6.1: identify and explain the types of deaths investigated by toxicologists.
Competency 6.2: discuss the procedures and interpretation for a toxicology analysis.
Competency 6.3: identify the steps taken to become a forensic document examiner.
Competency 6.4: discuss the examination process of questioned documents.

**Outcome #7: Students will be exposed to blood stain pattern interpretation.**
Competency 7.1: discuss the origin(s) of the bloodstains.
Competency 7.2: identify the distances between impact areas of blood spatter and origin at time of bloodshed.
Competency 7.3: recognize the type and direction of impact that produced the bloodstains or spatter.
Competency 7.4: correlate the movement and direction of the victim, the assailant or objects at the scene after the bloodshed.

**Outcome #8: Students will gain an overview of serology and DNA typing.**
Competency 8.1: identify and discuss the duties of the forensic serologist.
Competency 8.2: explain and discuss the different types of biological substance that can be analyzed as part of the serology examination.
Competency 8.3: have an understanding of DNA profiling.
Competency 8.4: discuss the DNA principles and procedures for crime lab testing.

**Outcome #9: Students will be exposed to forensic odontology and forensic anthropology.**
Competency 9.1: discuss the practice and procedures of the forensic odonatologist.
  Competency 9.2: explain when a dental identification is needed and the procedures for identification.
Competency 9.3: understand the scope and workings of the field of forensic anthropology.
Competency 9.4: explain and discuss the facial reconstruction attributes of this technology.