

Forensic Science 30 – Distance Education

GENERAL INFORMATION

- i. Forensic Science 30 – 2018/2019
- ii. Instructor – Rene Cannon
- iii. Contact Information
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COURSE DESCRIPTION

- i. The goal of Forensic Science 30 is to enable students to gain an overview of forensics and how it is used today to assist in the solving of crimes or during investigations. This course will provide students with an overview of the basic elements involved in the science of forensics with a view to career path and choices that may be associated with this field of study.
- ii. Prerequisite – Forensic Science 20 highly recommended

STUDENT LEARNING OUTCOMES

Areas of Study from the Forensic Science 30 Curriculum include:

UNIT ONE: Investigative Process

- Recognize the steps in securing a crime scene and the various types of evidence that may be collected in order to solve a crime.
- Understand, from a legal standpoint, the importance of properly securing a crime scene
- Outline protocols used when a crime scene is being secured and evidence is being procured by law enforcement members
- Classify the various types of evidence that may be obtained at a crime scene
- Identify the importance of taking safety precautions at a crime scene
- Identify various types of evidence that may be collected at a crime scene including procedures for identification, collection, and analysis for the purpose of investigating and prosecuting crimes
- Recognize the evolving importance of DNA evidence in investigating and prosecuting crimes

UNIT TWO: Forensic Toxicology

- The student will answer forensic problems in the area of drugs, specifically causing death.
- The student will describe the effect of illegal drugs upon the human body
- The student will identify the effects of poisons and toxins
- The student will examine forensic toxicology testing techniques

UNIT THREE: Forensic Pathology

- The student will answer forensic problems in the area of medicine, specifically regarding death.
- The student will describe disease as a cause of death
- The student will identify changes in the appearance of the face and body after death
- The student will identify roles and differences of coroner and medical examiner with specifics from Canada

UNIT FOUR: Forensic Odontology

- Students will answer forensic problems using an understanding of dental information.
- The student will identify uses of dental examination
- The student will illustrate the use of bite marks for identification

UNIT FIVE: Entomology & Anthropology

- The student will describe difference between human and animal skeleton systems
- The student will identify measurable traits of skeleton that can aid in identification
- The student will describe how the impact of insects can assist to determine age of carrion
- The student will identify insects unique and common to specific environments or locations

UNIT SIX: Computer, Audio & Video Forensics

- The student will identify prosecutable computer crimes
- The student will compare the acceptability of voice identification evidence
- The student will describe audio (and/or video) enhancement technique to improve listenability of a sound source. (Intelligibility enhancement beyond the scope of this course.)

UNIT SEVEN: Footwear, Tire & Tool Impressions

- The student will identify various ways to collect and identify footwear, tire and tool impressions
- The student will analyze whether footwear impressions can determine the activity of a person
- The student will determine causes of the unique characteristics found in tire treads
- The student will explain how tire evidence can be used to help identify a perpetrator
- The student will identify the types of information that can be determined from tool mark evidence
- The student will explain why it is important for investigators to find a tool used in a crime as soon as possible and identify the types of trace evidence that may be collected

UNIT EIGHT: Forensic Accounting

- The student will describe economic crime
- The student will describe proper manner in which allegations of fraud should be investigated to meet the requirements of civil/criminal court procedures
- The student will list the procedures that can be implemented to deter fraud
- The student will describe the details of each step to process evidence (release property as appropriate, deliver evidence for laboratory analysis, package for shipping, prepare cleared property, destroy cleared property)

TEACHING STRATEGIES

- i. Forensic Science 30 will be a digital, project-based course delivered through Moodle. While you will be able to work on this course at whatever time suits you, there will be a suggested set of deadlines in order to help you succeed in completing the course within the given semester. Projects may include, but will not be limited to:
 - a. Discussion Forums, On-line Presentations, Research Projects
- ii. Sample deadlines
 - a. Semester One
(With the late start date, if you require additional time, an extension will be granted)**
October 1 – October 10: Unit One – Investigative Process
October 11 – October 22: Unit Two – Forensic Toxicology
October 23 – November 1: Unit Three – Forensic Pathology
November 2 – November 13: Unit Four – Forensic Odontology
November 14 – November 26: Unit Five: Entomology & Anthropology
November 27 – December 11: Unit Six: Computer, Audio & Video Forensics
December 12 – December 21: Unit Seven: Footwear, Tire & Tool Impressions
January 7 – January 14: Unit Eight: Forensic Accounting
January 15 – January 28: Final Project
 - b. Semester Two
January 30 – February 11: Unit One: Investigative Process
February 12 – February 25: Unit Two: Forensic Toxicology
February 26 – March 13: Unit Three: Forensic Pathology
March 14 – March 27: Unit Four: Forensic Odontology
March 28 – April 12: Unit Five: Entomology & Anthropology
April 13 – April 29: Unit Six: Computer, Audio & Video Forensics
April 30 – May 13: Unit Seven: Footwear, Tire & Tool Impressions
May 14 – May 27: Unit Eight: Forensic Accounting
May 28 – June 17: Final Project

- iii. The goals of the Forensic Science 30 curriculum are to:
- a. understanding of the science behind Forensics, including real-life examples of its application in the solving of crimes
 - b. awareness of the variety of techniques and technologies employed during a criminal investigation
 - c. teamwork and relationship skills, required in the area of forensics, particularly during an investigation
 - d. opportunities to explore potential career options in the area of forensics
 - e. problem-solving and critical thinking skills when analyzing cases and potential evidence

COURSE MATERIALS

- i. Any readings will be provided by the instructor through Moodle (either in print or audio version)
- ii. Any projects requiring multimedia presentations or tools can be created using whatever software/equipment is available at your home or school. The instructor and students will work together to ensure that all assignments can be completed using what is available.

EVALUATION:

Learning outcomes for Forensic Science 30 are divided within the main units/modules and will be assessed in the following way throughout the course:

Major Module Assignments and Projects – 50%

- In the different units, there will be assignments or projects that will take more time and research to complete; these will be posted as major assignments. A specific marking rubric or breakdown will be provided on each assignment page. Assignments in this category will come at the end of a module as summative evaluation. These assignments will ask you to demonstrate your understanding of several skills and ideas.

Portfolio of Classwork – 40%

- Many of the lessons will have assignments to check for understanding of key concepts and ideas. These assignments will be smaller and take less time than the Unit Projects. Assignments in this category will come throughout a module and will be used to check for understanding for formative assessment purposes.

Student Responses – 10%

- Periodically, I will post links, articles, questions for you to discuss with other members of the class. Alternatively, you may be asked to select an article and pose a question for your classmates to answer. These activities will be assessed out of ten, based on your responses to the prompts provided.

There will not be a final exam in this course. On the final page of this syllabus, you may view a sample rubric that will be used for assessment.

Holistic Scoring Guide

Insightful: Assignment/response is insightful and sophisticated and demonstrates confident control of language. Assignment expectations are exceeded on one or more levels. The assignment/response astutely conveys the message and achieves the purpose for the intended audience. The assignment/response is well-crafted, fully developed, well organized, can coherent. Sentences are varied and polished. The few errors are likely the result of risk-taking.

Thoughtful: Assignment/response is thoughtful and clear and demonstrates effective control of language. The assignment/response clearly conveys the message and achieves the purpose for the intended audience. The assignment/response is fully developed, logical, organized, and coherent. Sentences are varied and correct. The few errors do not impede communication.

Straightforward: Assignment/response is straightforward and predictable and demonstrates adequate control of language. The assignment/response clearly and predictably conveys the message to achieve the purpose and demonstrates some awareness of the intended audience. The assignment/response is adequately developed with sufficient, but formulaic organization. Common sentence constructions are correct but show little variety. Minor errors, though noticeable, do not impede understanding.

Adequate: Assignment/response is adequate and demonstrates rudimentary control of language. The assignment/response conveys a recognizable message in a simple way and neither consistently achieves purpose nor consistently demonstrates awareness of the intended audience. The assignment/response is understandable but would benefit from more development. Common and simple constructions are generally correct but show little variety. Some errors impede understanding.

Limited: Assignment/response is limited and demonstrates uneven control of language. The assignment/response conveys a limited, over-generalized message that addresses only a portion of the prompt and does not achieve the purpose. The assignment/response demonstrates limited awareness of the intended audience. The assignment/response demonstrates less than adequate planning. Common and simple sentence constructions demonstrate some control, but attempts at variety result in awkwardness and obscured meaning. Frequent errors impede understanding.

Unclear: Assignment/response is unclear and unfocused and demonstrates little to no control of language. The assignment/response is unfocused and unclear. The assignment/response demonstrates no awareness of the intended audience. The assignment/response does not show evidence of planning, and it is difficult to determine main ideas. Sentences are incomplete, run-on, and/or simple in structure. Many errors obstruct and prevent understanding.

Not scorable: Assignment/response is too short to warrant a mark.