

## Forensic Science 20 – Distance Education

### **GENERAL INFORMATION**

- i. Forensic Science 20
- ii. Instructor – Rene Cannon
- iii. Contact Information
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  - b. Text – (306) 320-7831

### **COURSE DESCRIPTION**

- i. The goal of Forensic Science 20 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 – Science 10 highly recommended

### **STUDENT LEARNING OUTCOMES**

Areas of Study from the Forensic Science 20 Curriculum include:

#### **UNIT ONE: Introduction to Forensic Science**

- FS20-IF1: Explore the roles, protocols and procedures involved in the initial stages of forensic investigations

#### **UNIT TWO: Trace Evidence**

- FS20-TE1: Investigate procedures used for collecting and analyzing various types of trace evidence, such as fibre, gunshot residue, paint, glass and blood
- FS20-TE2: Analyze the significance of trace evidence in forensic investigations
- FS20-TE3: Explore methodologies and techniques used by forensic scientists in blood spatter analysis

#### **UNIT THREE: Identification Science**

- FS20-IE1: Examine the tools and procedures used in the identification, collection and preservation of human impression evidence such as fingerprints, footprints, and bite marks.
- FS20-IE2: Analyze the forensically significant information obtained from human impression evidence such as fingerprints, footprints, and bite marks.

#### **UNIT FOUR: Criminal Profiling**

- FS20-CP1: Investigate the significance of criminal profiling in forensic investigations.

#### **UNIT FIVE: Document Analysis**

- FS20-DA1: Examine methods and processes used in the analysis of the falsification and counterfeiting of documents.

#### **UNIT SIX: Arson and Explosives**

- FS20-AE1: Explore the forensic science used in investigations involving arson and explosives

#### **UNIT SEVEN: Career Exploration**

- FS20-CE1: Analyze and explore forensic science related occupations in Saskatchewan, Canada and the world

#### **FINAL PROJECT: Student Directed Study**

- FS20-SDS1: Create and carry out a plan to explore one or more topics of personal interest relevant to Forensic Science 20.

## **TEACHING STRATEGIES**

- i. Forensic Science 20 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
    - September 1 - September 13: Unit One: Introduction to Forensic Science
    - September 14 - September 29: Unit Two: Trace Evidence
    - October 3 – October 28: Unit Three: Identification Science
    - October 31 - November 18: Unit Four: Criminal Profiling
    - November 21 - December 1: Unit Five: Document Analysis
    - December 5 - January 13: Unit Six: Arson and Explosives and Unit Seven: Career Exploration
    - January 16 - January 23: Final Project
  - b. Semester Two
    - January 31 – February 10: Unit One: Introduction
    - February 13 - February 26: Unit Two: Types of Evidence and Fingerprint Analysis
    - February 27 - March 24: Unit Three: Trace Evidence and Blood
    - March 27 - April 21: Unit Four: Criminal Profiling
    - April 24 - May 19: Unit Five: Law Enforcement Protective Equipment
    - May 23 - June 2: Unit Six: Arson and Explosives and Unit Seven: Forensic Ballistics
    - June 5 - 20: 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 20 are divided within the main units/modules and will be assessed in the following way throughout the course:

### **Major Module Assignments and Projects – 40%**

- 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 – 35%**

- 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 – 5%**

- 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.

### **Final Project – 20%**

- There will not be a final exam in this course. Instead, you will be given options to continue your learning in one area, in depth, by completing a final project.

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.