

LOCALLY DEVELOPED COURSE OUTLINE

Forensic Studies (2021)25-3

Forensic Studies (2021)35-3

Submitted By:

The Chinook's Edge School Division

Submitted On:

Apr. 23, 2021

Course Basic Information

<u>Outline Number</u>	<u>Hours</u>	<u>Start Date</u>	<u>End Date</u>	<u>Development Type</u>	<u>Proposal Type</u>	<u>Grades</u>
25-3	62.50	09/01/2021	08/31/2025	Acquired	Authorization	G11
35-3	62.50	09/01/2021	08/31/2025	Acquired	Authorization	G11

Course Description

In Forensic Studies 25-35, students will investigate and evaluate the processes involved in the collection and preservation of crime scene evidence. As students delve into forensic studies, they will investigate and analyze the strengths and limitations of forensic evidence analysis. This course sequence focuses on the ethical considerations involved in the use of forensic evidence. As well, students will explore a variety of occupations and potential career opportunities in the field of forensics.

Forensic Studies (2021) Course Sequences:

Sequence 1:

- Forensic Studies (2021) 25 3 developed by The Edmonton School Division, prerequisite(s): Science 10 or 14

- Forensic Studies (2021) 35 3 developed by The Edmonton School Division, prerequisite: Forensic Studies (2021) 25 3

OR

Sequence 2:

- Forensic Studies (2021) 25 3 developed by The Edmonton School Division, prerequisite(s): Science 10 or 14

- Forensic Studies (2021) 35 5 developed by The Pembina Hills School Division, prerequisite: Forensic Studies (2021) 25 3

Students may not earn credits in both versions of Forensic Studies 35 3 (3credits) and Forensic Studies 35 5 (5 credits).

Note: Front matter is different between Forensic Studies 25-3 & 35-3 (3 credits) and Forensic Studies 35-5 (5 credits).

Course Prerequisites

Forensic Studies 25 prerequisite: Science 10 or Science 14

Forensic Studies 35 prerequisite: Forensic Studies 25

Sequence Introduction (formerly: Philosophy)

In Forensic Studies 25-35, students use reasoned approaches to the analysis of forensic evidence and the examination of the ethical considerations surrounding the collection and application of forensic evidence. This course sequence supports the development of a variety of competencies. In particular, through the investigation of forensic case studies, students develop science process skills and other key competencies such as critical thinking and managing information. Forensic Studies 25-35 also fosters hands-on problem solving, discovery through inquiry and collaboration. Forensic Studies 25-35 draws on a student's existing curricular knowledge and challenges them to look at problems in a new way, thereby creating unique pathways of thought. Through the study of forensics, students will recognize the importance of having both an open mind and the intellectual flexibility to change their opinions and positions when necessitated by evidence.

Student Need (formerly: Rationale)

Forensic Studies 25-35 is intended to be accessible to both science-minded and creative thinking students who would like to apply scientific principles in real-world settings. This course sequence presents students with an opportunity to take a course that is of interest to them, while also developing a realistic understanding of forensic evidence-gathering techniques and the ethical complexities that confront experts using forensic evidence. Through the exploration of possible career pathways in forensics, students in Forensic Studies 25-35 will develop an accurate and realistic picture of the rigour of the discipline of forensics.

Scope and Sequence (formerly: Learner Outcomes)

Forensic Studies 25

Essential Understanding 1: Applying logical thought and creativity enables us to achieve outcomes, solve problems and develop analytical thinking skills. (Guiding Questions 1 & 3)

Essential Understanding 2: Exploring connections strengthens our understandings of relationships to help us make meaning of the world. (Guiding Questions 5, 7, 9, 11 & 13)

Forensic Studies 35

Essential Understanding 1: Applying logical thought and creativity enables us to achieve outcomes, solve problems and develop analytical thinking skills. (Guiding Questions 2 & 4)

Essential Understanding 2: Exploring connections strengthens our understandings of relationships to help us make meaning of the world. (Guiding Questions 6, 8, 10, 12, 14)

Guiding Questions (formerly: General Outcomes)

- 1 How can techniques and processes be used to examine forensic evidence at crime scenes?**
- 2 How can techniques and processes be effectively applied to forensic evidence at crime scenes?**
- 3 How can forensic evidence be analyzed?**
- 4 How can analytical techniques be effectively applied to forensic evidence?**
- 5 How do forensic experts from a variety of fields contribute to a criminal investigation?**
- 6 How can forensic experts from a variety of fields collaborate to effectively impact a criminal investigation?**
- 7 How can forensic evidence be used in legal proceedings?**
- 8 How can forensic evidence be used to determine outcomes in legal cases?**
- 9 How can ethical considerations exist in the field of forensics?**
- 10 Why is it important to consider a variety of perspectives on ethical issues in the field of forensics?**
- 11 How can individuals influence a field of study?**
- 12 How can a field of study evolve over time?**
- 13 What career opportunities are available in the field of forensics?**
- 14 How can I expand my knowledge of career opportunities in the field of forensics?**

Learning Outcomes (formerly: Specific Outcomes)

1 How can techniques and processes be used to examine forensic evidence at crime scenes?	25-3 35-3
1.1 Students examine techniques and processes used to secure, document and preserve a variety of crime scenes.	X
1.2 Students classify and describe a variety of types of forensic evidence found at a variety of crime scenes.	X
1.3 Students examine techniques and processes used to locate and collect forensic evidence found at a variety of crime scenes.	X
2 How can techniques and processes be effectively applied to forensic evidence at crime scenes?	25-3 35-3
2.1 Students apply techniques and processes used to secure, document and preserve a variety of crime scenes.	X
2.2 Students evaluate a variety of types of forensic evidence found at a variety of crime scenes.	X
2.3 Students apply techniques and processes used to locate and collect forensic evidence found at a variety of crime scenes.	X
3 How can forensic evidence be analyzed?	25-3 35-3
3.1 Students examine a variety of techniques used to analyze different types of forensic evidence.	X
3.2 Students explain the sequence of steps involved in the analysis of different types of forensic evidence.	X
3.3 Students infer the strengths and limitations of a variety of analytical methods used to process forensic evidence.	X
4 How can analytical techniques be effectively applied to forensic evidence?	25-3 35-3

4.1 Students apply a variety of analysis techniques to forensic evidence.	X
4.2 Students describe testable inferences (hypotheses) about a crime by applying a variety of forensic analysis techniques.	X
4.3 Students compare the effectiveness of a variety of analytical methods used to process forensic evidence.	X

5 How do forensic experts from a variety of fields contribute to a criminal investigation?	25-3 35-3
5.1 Students examine the roles and responsibilities of a variety of forensic experts in a criminal investigation.	X

6 How can forensic experts from a variety of fields collaborate to effectively impact a criminal investigation?	25-3 35-3
6.1 Students relate the effectiveness of the collaboration between forensic experts to the impact on a criminal investigation.	X

7 How can forensic evidence be used in legal proceedings?	25-3 35-3
7.1 Students examine the role of forensic evidence in legal proceedings.	X
7.2 Students examine cases where forensic evidence informed a legal decision.	X

8 How can forensic evidence be used to determine outcomes in legal cases?	25-3 35-3
8.1 Students evaluate how effectively forensic evidence is used in legal proceedings.	X
8.2 Students explain the role of forensic evidence in solving active cases and cold cases and in overturning wrongful convictions.	X

9 How can ethical considerations exist in the field of forensics?	25-3 35-3
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9.1 Students describe ethical considerations in the analysis of forensic evidence.	X
9.2 Students examine the ethical considerations of biometrics and other criminal profiling techniques.	X

10 Why is it important to consider a variety of perspectives on ethical issues in the field of forensics?	25-3 35-3
10.1 Students discuss ethical considerations in the analysis of forensic evidence.	X
10.2 Students discuss a variety of perspectives regarding the ethics of using biometrics and other criminal profiling techniques.	X

11 How can individuals influence a field of study?	25-3 35-3
11.1 Students examine the historical contributions of pioneers in the field of forensic science.	X

12 How can a field of study evolve over time?	25-3 35-3
12.1 Students explain the evolution of the field of forensic science.	X

13 What career opportunities are available in the field of forensics?	25-3 35-3
13.1 Students examine a variety of careers in the field of forensics.	X

14 How can I expand my knowledge of career opportunities in the field of forensics?	25-3 35-3
14.1 Students research a career of their choice in the field of forensics.	X

Facilities or Equipment

Facility

No required facilities.

Facilities:

Equipment

No required equipment.

Learning and Teaching Resources

No required resources.

Sensitive or Controversial Content

Issues of a sensitive or controversial nature may be encountered or explored in this course. Teachers are advised to use their discretion and take the needs of individual students and the local community context into consideration when addressing sensitive or controversial topics or issues.

Issue Management Strategy

Health and Safety

No directly related health and safety risks.

Risk Management Strategy

Statement of Overlap with Existing Programs

Provincial Course with Overlap and/or Similarity: Science 6

Identified Overlap/Similarity: Topic D: Evidence and Investigation of Science 6 --General Learner Expectations 6-8 and 6-9 do require students to recognize that evidence found at the scene of an activity may have unique characteristics and they will potentially investigate such evidence as footprints, ink, handwriting, fabric, fingerprints. This may be seen as overlap with outcome 1.3 of Forensic Studies 25-35.

Reasoning as to Why LDC is Necessary: Elementary students are looking at evidence from simple scenes of human activity, while high school students in Forensic Studies 25-35 are examining and analyzing evidence found at crime scenes and considering the ethical use of the evidence gathered.

Provincial Course with Overlap and/or Similarity: Science 24

Identified Overlap/Similarity: In Unit C: Disease Defence and Human Health (Science, Technology and Knowledge) Outcome 4 mentions examination of DNA. DNA would be covered in some way in Forensic Studies 25-35.

Reasoning as to Why LDC is Necessary: None of the Science 24 course is focused on using forensics to examine crime scenes; therefore, Forensic Studies 25-35 takes an approach that is not covered in Science 24.

Provincial Course with Overlap and/or Similarity: Biology 30

Identified Overlap/Similarity: In Biology 30 there is a genetics/DNA unit, and DNA would certainly come up in Forensic Studies 25-35.

Reasoning as to Why LDC is Necessary: The DNA discussion in Biology 30 is not focused on its application for solving crime, while that is the cornerstone of Forensic Studies 25-35.

Provincial Course with Overlap and/or Similarity: Science 30

Identified Overlap/Similarity: In Science 30 they do examine DNA, and DNA would certainly come up in Forensic Studies 25-35

Reasoning as to Why LDC is Necessary: The DNA discussion in Science 30 is not focused on its application for solving crime, while that is the cornerstone of Forensic Studies 25-35.

Provincial Course with Overlap and/or Similarity: LGS1020 Public Law

Identified Overlap/Similarity: In LGS1020 there is an examination of the laws that protect rights and responsibilities (1.2). As the ethics of the use of forensic evidence is discussed in Forensic Studies 25-35, some discussion of legislation would ensue. As well, in LGS1020 there is the description of the criminal process which may tangentially be focused on as the criminal cases were examined in Forensic Studies 25-35.

Reasoning as to Why LDC is Necessary: The intention of LGS1020 Public Law is to explore the relationship between the government and the citizen, which is not the intention of Forensic Studies 25-35. Forensic Studies 25-35

aims to hone students' critical thinking through the examination of ethics in forensics.

Provincial Course with Overlap and/or Similarity: LGS3080 Criminal Law

Identified Overlap/Similarity: Some minor overlap was identified. In LGS3080 (3.7.9), students will examine the criminal process and as part of this, will look at some issues related to evidence. The examples are given as "hearsay, prior bad acts". In Forensic Studies 25-35, students will be examining forensic evidence that could be used in criminal cases.

Reasoning as to Why LDC is Necessary: Forensic Studies 25-35 examines the science of forensics and the ethics surrounding the use of evidence, which is not the focus of this CTS course.

Locally Developed Courses with Overlap and/or Similarity: Forensic Science Studies 35 (5 credit)

Identified Overlap/Similarity: The Forensic Science Studies 35 and the 3-credit course sequence Forensic Studies 25-35 certainly do have overlap as they are both concerned with examining forensic evidence.

Reasoning as to Why LDC is Necessary: Forensic Science Studies 35 is intended to be studied through online and outreach programs, which is not the intention of Forensic Studies 25-35. Forensic Science Studies 35 has detailed specific learner outcomes, while the intent of Forensic Studies 25-35 is to allow some teacher discretion in the scope of discovery as they address the specific outcomes. The Forensic Studies 25-35 sequence does encourage a progression of skills development by having students recognize techniques and processes in Forensic Studies 25, and then apply and analyze the techniques and processes in Forensic Studies 35. Forensic Studies 25-35 does build on 10-level science courses and, therefore, provides a complete high school sequence. As well, Forensic Studies 25-35 has a heavy emphasis on examining the ethical considerations in the analysis and use of forensic evidence.

Student Assessment

No identified student assessments.

Course Approval Implementation and Evaluation

