Cobb County School District 2018-2019

Forensics Teaching & Learning Framework					
Unit 1 4 weeks BL/8 weeks YR	**Unit 2** 3 weeks BL/6 weeks YR	**Unit 3** 3 weeks BL/6 weeks YR	**Unit 4** 3 weeks BL/6 weeks YR	**SLO Exam**	**Unit 7:** 2-3 weeks BL/ weeks YR
Unit 1: Recognizing & Classifying Evidence **SFS1**	**Unit 2:** **Techniques to Analyze Evidence** **SFS2**	**Unit 3:** **The Role of Forensics as it Applies to Mediolegal Death Investigations** **SFS5**	**Unit 4:** **Drugs, Toxicology, Blood, and DNA** **SFS3**		**Unit 5:** **Impressions, Tool Marks, Weapons, & Arson** **SFS4**
SFS1. Students will recognize and classify various types of evidence in relation to the definition and scope of Forensic Science a. Compare and contrast the history of scientific forensic techniques used in collecting and submitting evidence for admissibility in co urt (e.g. Locard's Exchange Principle, Frye standard, Daubert ruling). b.Distinguish and categorize physical and trace evidence (e.g. ballistics, drugs, fibers, fingerprints, glass, hair, metal, lip prints, soil, and toxins). c. Determine the proper techniques to search, isolate, collect, and record physical and trace evidence. d. Evaluate the relevance of possible evidence at the site of an investigation. e. Organize relevant information to accurately develop and submit both scene and analysis reports.	**SFS2. Students will use various scientific techniques to analyze physical and trace evidence.** a. Identify and utilize appropriate techniques used to lift and evaluate readable, latent, plastic and visible fingerprints. b. Analyze the morphology and types of hair, fibers, soil and glass. c. Evaluate how post mortem changes are used to determine probable time of death: Rigor mortis Livor mortis Algor mortis Gastric contents d. Identify methods used for the evaluation of handwriting and document evidence. e. Determine the appropriate uses of chromatography and spectroscopy in evidence analysis.	**SFS5. Students will evaluate the role of Forensics as it pertains to Medicolegal Death Investigation**. a. Identify various causes of death (blunt force trauma, heart attack, bleeding, etc.). b.Analyze evidence that pertains to the manner of death (natural, homicide, suicide, accidental, or undetermined)	**SFS3. Students will analyze the use of toxicology, serology, and DNA technology in forensic investigations**. a.Classify toxins and their effects on the body. b.Compare the effects of alcohol on blood alcohol levels with regard to gender, and according to the law. c.Evaluate forensic techniques used to isolate toxins in the body. d. Differentiate the forensic techniques used to distinguish human and animal blood e. Analyze the physics of blood stain patterns		**SFS4. Students will evaluate the role of ballistics, tool marks and evidence of arson in forensic investigation.** a.Identify firearm lab tests used to distinguish the characteristics of ballistics and cartridge cases. b.Analyze the physics of ballistic trajectory to predict range of firing. c.Recognize the forensic significance of tool marks, footwear and tire impressions in an investigation. d.Evaluate possible indicators of arson and criminal bombing
These units were written to build upon concepts from prior units, so later units contain tasks that depend upon the concepts addressed in earlier units. All units will include the co-requisite **Characteristics of Science Standards** including the **Nature of Science** and **Habits of Mind** elements of the Georgia Performance Stan.					