Directions: This template must be used for all other content areas taught and for each course required for graduation, excluding language arts, math and science content areas and courses. For each other content area or course, complete the document below to include all appropriate Strands and Concepts for the course.

Curriculum Planning Document – Electives			
Content Area/Grade Level: Forensic Science B (More Secrets of the Dead) / High School			
Course Description: Although the crime scene is the first step in solving crimes through forensic science, the crime laboratory plays a critical role in the analysis of evidence. This course focuses on the analysis of evidence and testing that takes place within the lab. It examines some of the basic scientific principles and knowledge that guide forensic laboratory processes, such as those testing DNA, toxicology, and material analysis. Techniques such as microscopy, chromatography, odontology, mineralogy, and spectroscopy will be examined.			
	Educational Delivery Methodologies	**Evidence of Mastery**	**Comments**
Unit 1: Drug Evidence **What Will You Learn in This Unit?** 1. Identify some of the different types of drugs and their effects. 2. Describe some of the common ways that samples can be taken from humans to test for drugs. 3. Consider some of the issues in collecting and preserving drug evidence. 4. Discuss screening tests and their uses in criminal investigations. 5. Discuss confirmatory tests and their uses in criminal investigations. **Unit 2: Forgeries & Document Examination** **What Will You Learn in This Unit?** 1. Talk about questioned documents and exemplars.	The Edmentum LMS (PLATO Courseware) as detailed in the narrative, includes a diverse set of instructional methodologies integrated into each course. These instructional methods include: computer assisted learning systems, virtual classrooms, virtual labs, electronic field trips, electronic mail and messaging, virtual tutoring, online help desk, a wide array of formative assessments and non-computer activities. The common design elements and activities combined with a thorough initial orientation video lecture support a student's quick understanding of the delivery system. This immediate understanding enables a student to	Mastery for each course will be based on the student meeting the prescribed Performance, Participation, and Progress requirements. The Program is designed to foster high expectations for staff and students. The goal for all students is to meet 100% of the expected progress and 100% of the expected weekly participation. The desired performance goal for all students is to attain a score of 100% on all assignments. The minimum that will be accepted on each assignment and assessment is 70%.	Continues throughout the course

2. Describe some of the aspects that document examiners use to compare handwriting. 3. Understand some of the aspects that document examiners use to compare typescript. 4. Discuss some of the ways that document alterations can be found. 5. Discuss how document examiners find forgeries and counterfeit materials. **Unit 3: Forensic Toxicology** **What Will You Learn in This Unit?** 1. Discuss the history of forensic toxicology. 2. Name some poisonous substances that have been used in history. 3. Discuss techniques used by forensic scientists to identify poisons and other toxins. 4. Describe what makes some toxic substances popular for trying to harm others. 5. Understand the role of toxicologists in criminal investigations. **Unit 4: Paint, Soil, & Trace Evidence** **What Will You Learn in This Unit?** 1. Describe the different types of microscopes used in the forensic laboratory. 2. Discuss how paint and fiber evidence is	focus on the content right from the beginning of the first lesson. Each course utilizes a variety of methods and has the flexibility to allow teachers to modify the program to suit individual student learning needs. The Edmentum LMS (PLATO Courseware) enables the teacher to employ numerous educational delivery options for each online course. The ability to modify delivery methods empowers teachers to efficiently and effectively support differentiation of instruction, customized assessments, and supplementation of course material for different learning styles. Providing online students a choice in how they absorb content is considered a key to supporting different learning styles. The primary delivery method for the proposed program is web-based online delivery. Based on needs identified by teacher monitoring, formative and summative assessment, or student request, the delivery method can be modified in numerous ways.	***Assessment and Testing*** Best practices in assessment and testing call for a variety of activities to evaluate student learning. Multiple data points present a more accurate evaluation of student strengths and needs. **Formative and Summative Assessments** contained in the web-delivered content, which include authentic learning and objective assessments are used to show mastery: • Unit pretests (typically designed for credit recovery use) • Mastery tests • Lesson Activities • Unit Activities • Online Threaded Discussions • Unit Post-Tests • End-of-Semester Exam **Authentic Learning Assessments**: Of the assessment tools available in this course, three are designed specifically to address higher-level thinking skills and operations: Lesson activities, unit activities,	

collected. 3. Discuss some of the techniques used to test and compare paint and fiber evidence. 4. Discuss polymers and their role in synthetic fibers. 5. Understand what comparisons between fiber and paint evidence and known samples can tell forensic scientists. **Unit 5: Forensic Entomology** **What Will You Learn in This Unit?** 1. Define forensic entomology and its uses. 2. Discuss the history of forensic entomology. 3. Discuss what insects and arthropods are common pieces of evidence in criminal investigations. 4. Describe some of the tests used in forensic entomology. 5. Understand studies into insect activity as they related to forensic science. **Unit 6: Forensic Anthropology** **What Will You Learn in This Unit?** 1. Discuss the areas of forensic anthropology and forensic odontology. 2. Outline the history of forensic anthropology and odontology. 3. Describe some of the characteristics of bones and teeth that provide forensic scientists with information about the person.	**<u>Flexible deliverability</u>** **All online materials are printable.** The interface and font of the content can be adjusted to minimize the amount of ink used in printing. **eNotes**: In lieu of paper notes, the students have the option to take eNotes while listening to & interacting with the tutorials or while studying the online readings and content. These notes can be made available at the end of lesson or course assessment at the discretion of the teacher and the individual student. **Secure internal messaging system:** provides the option for synchronous or asynchronous support of student learning. **Teacher online office hours:** Teachers provide four hours of online synchronous office hours. Additional synchronous time can be requested by students as needed. **Phone communication as required.**	and discussions. These authentic learning activities allow students to develop deep understanding and provide data for the teacher to assess knowledge development. They also provide a tool for assessing identified Common Core mathematical practices, inquiry skills, STEM skills, and 21st century skills. The following comments address their use for assessment. • **Lesson Activities** immerse the student into one or more in-depth problems that center on developing a deep understanding of the learning objective. All Lesson Activities in this course are self-checked by the student; however, it is possible to submit this work for teacher grading on paper, by email, or by creating a drop box activity in the course learning path. • **Unit Activities** are similar to Lesson Activities, but more time intensive and require a more integrative	

4. Describe some of the tests used in the area of forensic anthropology. 5. Understand the use of forensic anthropology in the criminal justice system. **Unit 7: Digital Evidence** **What Will You Learn in This Unit?** 1. Understand the different parts of computers. 2. Discuss the areas of a computer where information can be retrieved. 3. Analyze how computer evidence can be collected and preserved. 4. Describe the different types of data available on computers. 5. Discuss the use of forensic images. **Unit 8: The Future of Forensic Science** **What Will You Learn in This Unit?** 1. Discuss how computers are being used in forensic science. 2. Discuss some of the recent advances in forensic techniques and testing. 3. Analyze how advances in other disciplines impact forensic science. 4. Understand some current limitations of forensic science investigations. 5. Discuss some of the possible future changes in forensic science.	Teachers will have access to phone numbers and refer students and parents to a phone conference as required. **Supplemental assignments:** The content can be delivered by all lessons or one lesson at a time. Teachers may determine that an alternative assignment that covers the same objective may be appropriate. **Supplemental resource links:** Students may seek out additional information or guidance about a lesson objective by utilizing a personal search engine such as Google. Teachers will also collect and send out additional resource links as the need arises. **Practice exercises:** The teacher may assign practice exercises in addition to the online content. The teacher would have the opportunity to weight these additional assignments as part of the lesson performance score, as part of the participation grade, or as extra credit. Any editing or adjustment of the student's score	understanding of the unit's objectives. Unit activities are teacher graded and submitted through the drop box. These activities allow the instructor to score work on a scale of 0 to 100. A 10-point suggested rubric is provided to both the student and the teacher for this purpose. A minimum score of 70% is required. • **Discussions** encourage students to reflect on concepts, articulate their thoughts, and respond to the views of others. Thus, discussions help teachers assess students' critical-thinking skills, communication skills, and overall facility with the unit concepts. Each unit in this course has one predefined discussion topic. Instructors can customize the course, however, to include additional discussion topics. Online discussions may use	

	requires a full justification in the notes section at the time the teacher makes the change. **Universal access:** The content is available at all times and on all days. Students will be able to access their online content as long as they have access to the Internet. Those that seek help from someone that may not have a computer or Internet may print the material and seek help while working on the paper version. **Learning Aids:** Learning aids within the courseware that are designed to assist students include: • eNotes • Resource Folder • Dictionary • Text to Speech (content reader) • Translator (16 languages) • Scientific Calculator • Math tools (graphing tool, histogram, scatter plot, stem &leaf) Students will be guided to these tools at the time of enrollment, during the video orientation, and as the need is identified by the teacher.	whatever rubric the instructor sets. A minimum score of 70% is required. **<u>Objective Assessments.</u>** There is a specific learning objective associated with each lesson, which is assessed through objective assessments at multiple points during the course: at the end of the specific lesson, at the end of the unit, and at the end of the semester. Additionally, there are optional unit pretests. • **Unit pretests** are optional multiple-choice assessments, typically designed for credit recovery use. If a student shows mastery of a lesson's objective (70% proficiency), the student will be automatically exempted from that module in the upcoming unit. • **Mastery tests** at the end of each lesson provide the instructor and the student with clear indicators of	

		areas of strength and weakness. These multiple-choice tests are taken online and contain randomly generated questions. A minimum score of 70% is required and a student may retake the mastery tests as many times as needed to demonstrate at least a 70% proficiency. • **Unit posttests** help instructors track how well students have mastered the unit's content. The tests are multiple-choice and are provided online. A minimum score of 70% is required. • **End-of-semester tests** assess the major objectives covered in the course. The End-of-Semester Test will be proctored (required) and a minimum score of 70% is required. Remediation assignment will be provided if a student does not meet	

		the 70% requirement, and then a new End-of-Semester test will be administered. By combining the unit pretest (if applicable) and unit posttest information with the end-of-semester test results, the instructor will gain a clear picture of student progress. The tests are multiple-choice (randomly generated questions) and are provided online. **Remediation:** Students that attain less than 70% on assignments will be required to complete a remediation assignment and make corrections to the assignments and eNotes. Teachers will work with the student to assist and reteach as needed. **Instructional Feedback:** Teachers will provide instructional feedback in teacher-graded assignments. Students will email the teacher with confirmation that the teacher's comments and instructional was read and	

		understood. **A midterm project** is required. Examples include: • Virtual field trip • Group or individual service learning activities • Video presentation • Web portfolio • Book Report • Research Project **A final research paper** is required. • It relates to or enriches course content • Students will have multiple topic options • Students may request an alternate subject (in a timely manner & appropriately) • MLA format is required • Six traits rubric used **<u>Scoring Rubric will vary based on type of activities in each course.</u>** **<u>Example:</u>** • Participation and Progress = 10% • Discussions = 10% • Drop Box (Unit/ Lesson	

		Activities) = 20% • Post Unit Tests = 20% • Midterm Project = 10% • End-of-Semester Test = 20% • Final Research Paper = 10% Total=100% **<u>Curriculum Reports:</u>** Edmentum LMS (PLATO Courseware) provides a wide array of reports that provide useable data concerning mastery of each lesson and assignment. Reports include: • Learner Progress Report by Learner • Learner Progress Report by Class • Learner Daily Usage by Learner • Learner Daily Usage by Class and Assignment • Curriculum Items Response Report Curriculum Strengths and Needs by Class	