



Curriculum

Development:

Kristen Pratt

Editor-in-Chief:

Laura Welch

Editorial Team:

Craig Froman

Willow Meek

Judy Lewis

Art Director:

Diana Bogardus

Design Team:

Diana Bogardus

Terry White

Jennifer Bauer

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About the Author



Jennifer Hall Rivera EdD is the Director of Educational Programs for Answers in Genesis at the Creation Museum where she oversees and presents in daily workshops and is involved in educational outreach and the high school lab programs. Her interest in the forensic sciences started at an early age and is credited to the godly instruction of her father, a renowned fingerprint expert. Her experience in the field of forensic science includes employment in a crime scene unit, over a decade of teaching, journal publications, and numerous speaking events.



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Course Description: This forensic science textbook was developed to teach your student how to use keen observational techniques while providing a substantive understanding of the disciplines that make up forensic science. But more importantly, the goal of this textbook is to demonstrate how to study forensic science through the lens of a biblical worldview. In every lesson, your student will be provided applicable Scripture woven throughout the text, practical labs, and review materials to enhance understanding of the content.

As your student studies forensic science this year, they will learn how to distinguish between sensationalized forensic science in fictional crime scene television shows and news reports with that of authentic practice. This would be a great conversation topic for you to have with your student throughout the course. To bridge the understanding between what they watch on TV versus practical application, several case studies are provided for them in the textbook. These case studies are meant to raise their awareness of some of the most famous crimes in history, both solved and unsolved, while examining real investigative practices, time frames, and judicial results.

Features



Target Level

Designed for grades 11–12
1 Credit with Labs



Flexible 180-Day Schedule

Approximately 45 minutes per lesson, five days a week



Open & Go

Daily Schedule, Master Supply List, Answer Keys



Engaging Application

Exercises, Labs, Extension Activities

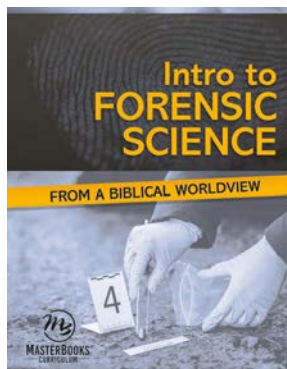


Assessments

Unit Tests, Cumulative Tests

Objectives

- ▶ Study forensic science through a biblical lens and learn how science clearly confirms the Bible.
- ▶ Discover how casts are taken of shoeprints and tire marks and how they are used in investigation.
- ▶ Evaluate fire and blood spatter patterns and how they are used to determine origin and method.
- ▶ Explore several types of microscopes and their purposes in forensic science.
- ▶ Examine the role of alcohol, drugs, tools, insects, and more in crime scene investigation.



Companion Book

Parent Introduction

Welcome to *Forensic Science* for high school students. You've selected one of the most captivating science courses for your student that will pique their interest for the entire year. During this course study, your student will evaluate real case studies, analyze forensic science articles, participate in hands-on labs, and develop an understanding of how to view forensics through the lens of God's Word.

At the heart of forensic science is the search for truth. And though an investigator may grope through the darkness for the truth behind a crime, as Christians, we realize that only in Christ and the Scriptures can we find authentic truth. John 17:17 (KJV) tells us, "Thy word is truth." Nonetheless, crime scene personnel are on the frontlines in pursuit of evidence to bring closure for the victims and punishment for the guilty. Therefore, forensic science is a scientific discipline composed of solid scientific practices, technology, and investigator expertise.

In the search for truth, investigators will have to examine grim circumstances, crime scenes, and criminal activity. Many of these situations are distressing and even disturbing for the investigator. This makes it even more important to study the Bible for understanding and clarity. You as the teacher will play a pivotal role in guiding the student in this study of investigative processes and a biblical worldview when assessing examples of criminal activity and case studies.

A few key concepts for teachers and parents can be found in God's Word. Isaiah 26:3 states, "You keep him in perfect peace whose mind is stayed on you, because he trusts in you." Also, criminal activity is rooted in the sinful nature of man, and understanding the fallen nature of man is important when studying forensic science. In essence, the discipline of forensic science would not need to exist without the fall of man into sin as described in Genesis 3. God's original creation was "very good" at the end of the creation week. This means in God's perfect creation there was no theft, murder, kidnappings, and other forms of criminal activity. But the entrance of sin changed everything. Though studying a sinful, fallen world can sometimes be challenging, through a biblical lens, we can strive to learn the amazing investigative techniques available to investigators through the ingenuity of our Creator God. John 1:3 reminds us of this: "All things were made through him, and without him was not any thing made that was made."

The study of forensic science is a fascinating course for high schoolers. Enjoy learning alongside your student as they study the complexity and design interwoven in forensic techniques established by our all-powerful, all-knowing Creator God.

Intro to Forensic Science follows a cycle of reading, corresponding exercise, application, and lab. Each lesson has 2–4 readings paired with their own one-page exercise. An introduction page is included at the start of the lessons in the teacher guide with helpful vocabulary and brief information about the case study. At the end of each lesson, students will complete an application exercise of the material they learned and then a lab. There are 34 lessons, which are grouped into units. There is a test at the end of each unit, as well as a cumulative test each semester.

Case Studies

Each lesson covers a particular forensic discipline or topic and begins with a case study outlining a true crime or event. These cases often describe hard and disturbing topics involving some of the worst of human sin nature. Some of these cases include the trial of the century of O.J. Simpson, Ted Bundy, the death of Michael Jackson, the Oklahoma City bombing, Andrea Yates, the St. Valentine's Day Massacre, the murder of Marilyn Sheppard, Gary Ridgway (the Green River Killer), John Wayne Gacy (the Killer Clown), Jonestown, and others. With such cases, there is a lot of sensitive information that is examined, mentioned, or implied — including, but not limited to, graphic depictions of bodies, child murder, sexual assault, homosexual relationships, drugs, alcohol, gang violence, coerced suicide, and mass murder.

The teacher should review each case study before the student begins the lesson. The student is also encouraged to take notes on things they want to discuss with the teacher from each case. There is space included on the back of the introduction page of each lesson for case notes. The teacher should then discuss the cases with the student, addressing difficult information and any fears this study may evoke, as well as be prepared to pray with the student.

Bible Component

A Bible verse relating to the lesson precedes each case study. There is also a biblical component within each lesson that further explores the topic in light of the Bible. These provide the student with a helpful and encouraging perspective, turning their focus to God's Word before and after encountering difficult subjects. Throughout the course, students will see why forensic science is a necessary field of study in our broken world and also how a godly individual can bring glory to God through such a career.

Applications & Labs

The applications and labs are opportunities for students to apply the knowledge they've gained from each lesson. The application exercises include labeling, defining, matching, critical thinking, and more. The labs in this course help students connect the forensic techniques they learn about to the real world. Some labs are more hands-on — such as creating and sketching a mini crime scene, processing fingerprints, and taking shoe impressions — while others focus more on critical thinking — such as identifying a criminal based on blood analysis, calculating the trajectory of a bullet, and criminal profiling. Each lab takes 1–2 days to complete.

WARNING: As with any science course that includes experiments, the materials and procedures can be potentially hazardous if not handled properly. Make sure to follow all instructions very carefully:

- ✓ Wear proper safety equipment when needed, including gloves, safety goggles/glasses, and heat protective gear
- ✓ Keep small children away from where the labs are conducted
- ✓ Wash hands, surfaces, and equipment properly after each experiment
- ✓ Make sure clothing and other household surfaces are protected from staining, burns, and other damage.

Students need to receive permission from their teacher before conducting labs with potentially hazardous materials and procedures. These labs are marked with a warning note. However, if the teacher is not comfortable with the student conducting these labs, the teacher can conduct the lab themselves and have the student observe. Lessons 20 and 24 include virtual lab components with videos that can be found on the Supplemental Resources page at masterbooks.com/classroom-aids.

Unit & Cumulative Tests

There are a total of eight units in this course, with one test per unit. Each of the units includes a different number of lessons and will test the student over information covered in the exercises. There are two cumulative tests, one per semester, which cover information from the unit tests.

Grading

It is always the prerogative of an educator to assess student grades however he or she might deem best. The following is only a suggested guideline based on the material presented through this course. To calculate the percentage of the worksheets and tests, the educator may use the following guide. Divide total number of questions correct (example: 43) by the total number of questions possible (example: 46) to calculate the percentage out of 100 possible.

$43/46 = 93$ percent correct.

The suggested grade values are noted as follows:

90 to 100 percent = A

80 to 89 percent = B

70 to 79 percent = C

60 to 69 percent = D

0 to 59 percent = F