

2026–2027 Forensic Science Course Guide

Proviso Mathematics and Science Academy

Instructor: Dr. John Wardisiani

jwardisiani@pths209.org

Class Website: Wardisiani.com

Course Description:

Forensic Science is an academically rigorous, interdisciplinary science course designed to expose students to the scientific principles, investigative methodologies, and analytical practices utilized within the field of criminal investigation and forensic analysis. Through the integration of biology, chemistry, physics, psychology, law, and criminal justice, students will examine how scientific reasoning and evidence-based practices are used to investigate crimes and support legal proceedings.

The course emphasizes higher order thinking skills, scientific inquiry, problem-solving, collaboration, and effective communication while encouraging students to apply classroom learning to authentic and relevant real-world scenarios. Students will engage in a wide variety of instructional experiences including laboratory investigations, evidence analysis, research activities, case studies, simulations, collaborative discussions, presentations, and written reflections.

Throughout the school year, students will analyze both physical and circumstantial evidence while exploring the ethical responsibilities connected to forensic investigations and scientific practice. Significant emphasis will be placed on precision, observation, documentation, organization, academic integrity, and professional conduct within both classroom and laboratory settings.

Students will also be expected to consistently demonstrate responsibility through the timely completion and submission of assignments, active participation in instructional activities, and adherence to all classroom, laboratory, district, and school-established policies and procedures. Due to the investigative and collaborative nature of the course, students are expected to maintain professionalism, respect learning environments, and contribute positively to classroom culture.

The successful completion of assignments, laboratory activities, formative assessments, projects, and course responsibilities is essential to student growth and mastery of course standards. Students are encouraged to communicate proactively regarding academic concerns while utilizing available supports and resources provided throughout the course.

Instruction throughout the course will align to the Proviso Instructional Framework (PIF) with a continued focus on student engagement, instructional discourse, data-informed practices, critical thinking, and authentic scientific application.

By the conclusion of the course, students will demonstrate their understanding of forensic methodologies through laboratory investigations, research projects, collaborative activities, presentations, written analysis, and comprehensive assessments designed to reflect both scientific understanding and investigative reasoning.

Tentative Course Schedule

August / September

- Course Introduction and Expectations
- Safety Procedures and Laboratory Expectations
- History of Forensic Science
- The Scientific Method in Criminal Investigations
- Crime Scene Investigation Basics
- Observation Skills and Evidence Collection

October

- Physical Evidence Analysis
- Glass Fracture Analysis
- Soil and Mineral Identification
- Hair and Fiber Analysis
- Impression Evidence
 - Footwear
 - Tire Tracks
 - Tool Marks

November

- Fingerprint Identification
- DNA Structure and Analysis
- Blood Evidence and Blood Spatter
- Toxicology Basics
- Trace Evidence Analysis

December

- Firearms and Ballistics
- Arson Investigations
- Document and Handwriting Analysis
- Digital and Cyber Forensics
- Semester Review and Final Exam Preparation

January

- Semester Final Exam
- Reflection and Goal Setting

February

- Forensic Anthropology
- Human Remains Identification
- Entomology and Time of Death
- Facial Reconstruction
- Psychology and Criminal Profiling

March

- Drug Identification and Analysis
- Forensic Chemistry Applications
- Serology and Body Fluid Analysis
- Case Study Investigations
- Expert Witness and Courtroom Procedures

April

- Advanced Crime Scene Reconstruction
- Mock Crime Scene Investigations
- Collaborative Forensic Research Projects
- Presentation Preparation

May

- Research Symposium / Case Presentations
- Final Project Presentations
- Review Activities
- Spring Semester Final Exam Preparation

June

- Final Exams
- Course Reflection
- End-of-Year Activities

Instructional Focus Areas

Students will engage in:

- Laboratory Investigations
- Case Study Analysis
- Collaborative Learning Activities
- Scientific Writing and Reflection
- Research and Presentation Opportunities
- Evidence-Based Argumentation
- Technology Integration
- Real-World Application of Scientific Concepts

Student Expectations

Students enrolled in Forensic Science are expected to demonstrate consistent academic responsibility, professionalism, and engagement throughout the duration of the course. Due to the investigative and laboratory-based structure of the class, student participation and accountability are essential components of overall success.

Students are expected to:

- Arrive to class prepared, on time, and ready to actively participate in instructional activities.
- Follow all classroom, laboratory, district, and school-established policies, procedures, and expectations.
- Demonstrate appropriate conduct and professionalism during laboratory investigations, collaborative activities, and classroom discussions.
- Complete and submit assignments, laboratory reports, projects, and assessments in a timely manner.
- Maintain academic integrity while demonstrating original thinking and ethical academic practices.
- Utilize instructional resources including Schoology, TEAMS, classroom materials, and supplemental supports when necessary.
- Communicate respectfully and effectively with peers, staff, and administration.
- Participate in collaborative learning opportunities while contributing positively to classroom culture.
- Follow all safety expectations connected to laboratory investigations and evidence analysis activities.
- Demonstrate personal responsibility by monitoring assignment submissions, grades, and overall academic progress throughout the semester.

Consistent attendance, participation, and assignment completion are critical components of student success within the course. Students who remain engaged, organized, and proactive in their learning are more likely to experience academic growth and success throughout the school year.

Please note that the course schedule and topics may be adjusted based on instructional needs, school events, student progress, and opportunities for enrichment throughout the school year.

Texts for our course:

- 1) Roach, M. (2003). *Stiff: The curious lives of human cadavers*. W. W. Norton & Company.
- 2) Saferstein, R. (2015). *Criminalistics: An introduction to forensic science* (11th ed.). Pearson.