

## Introduction:

Forensic Science is a one-semester course designed to introduce the scientific and investigative techniques used to solve a crime. The curriculum involves a strong understanding of the laboratory procedures taught and practiced in previous science courses. Many techniques used to analytically evaluate evidence include detailed background knowledge previously covered in Biology and Chemistry, as well as, knowledge in basic Physics and Earth Science. To be successful in Forensic Science it is highly recommended you have taken 1 or more of the previous science courses listed to be prepared for higher-order science practices.

The course will involve the application of chemical, physical, and biological principles for the investigation of physical evidence in criminal cases. It will entail analytical reasoning, laboratory testing, possible field trips, and provide expertise (qualified speakers who will present and help us to analyze evidence from criminal cases). Students will be taught the fundamentals of a criminal investigation and how it is applied in a court of law. The students will learn by doing – they will isolate and process crime scenes, analyze and interpret lab data, and problem solve. Each student's experience will culminate with the solving of a crime scene scenario.

While the majority of class time will be dedicated to the discussion and understanding of investigative techniques, outside-of-class time will be required to fully comprehend the topics and techniques being discussed. Students should expect to dedicate time outside of class to finish assignments that were started IN class. Homework assignments could include, but are not limited to, the following: completion of lab-investigations, data analysis, practice worksheets, on-line research, case studies, personal reflection papers, and selected readings from the text. While the assignments are not lengthy by any means, they are vital to your understanding of the curriculum and your eventual success within the course.

## Course Materials: **CANVAS IS WHERE YOU CAN ACCESS ALL THIS ELECTRONICALLY!!!**

- Text ~ Forensic Science: An Introduction to Scientific and Investigative Techniques
- Lecture/Discussion Notebook ~ Spiral-bound or Loose Leaf-Binder
- Folder ~ For handouts and reference material

## Class Expectations:

1. **Show courtesy and respect** for others in the classroom.
2. **Demonstrate self-responsibility and maturity at all times.**
3. **Follow all attendance policies.** This includes absences and cuts.
4. **Cell phones MAY be used or seen in class – for educational & constructive purposes.** All school policies apply.
5. **Come to class prepared.** You will need to bring your notebook, textbook, pen/pencil, and completed assignments each day. Penalties will be given for late work *dependent on the significance of the assignment.*
6. **Show pride in your own work.** Copying will result in zeroes for both parties. Plagiarism will not be tolerated and all school and district policies will apply. *CB's Academic Integrity Policy, as stated in your handbook, will be upheld to the utmost.*
7. **Attendance is critical** to your success.
  - a. It is your responsibility to get any missed notes, class work, or assignments.
  - b. If absent, you will have the number of school days absent to make up any missed work.
8. If you are absent from class (be in medical or school-sponsored trip) it is YOUR responsibility to retrieve any and all missed notes and assignments from someone else in the class. Handouts will be held by the instructor and given to you the day you return.
9. Extra credit will NOT be formally stated. It will be administered as additional questions on quizzes/exams, and as activity preparation before and/or after school. Also, extra credit will ONLY be awarded when offered to the entire class. There will be NO individual extra credit assignments.

## Grading and Evaluation:

There are many opportunities to accumulate grades/points during the marking periods. Grades are given for tests, quizzes, labs, research projects, classwork, and homework. All grades are posted on the parent portal site (i.e. Infinite Campus).

Grades per marking period will be calculated based on the following weighted groups:

- 90% Summative Work (Tests, Quizzes, Unit Concluding Investigation)
- 10% Formative Work (Daily Learning Assignments/Activities)

**Second Chance Opportunities:** Due to the nature of the course and how the assessments are structured, opportunities will be reviewed on a case-by-case assignment. Second Chance Learning Opportunities will follow CBSD guidelines and deadlines. *Please review the Day 1 Course Overview for more specific details.*

**Overall Course Grading:** At the end of each marking period, percents are converted to letter grades in accordance with the District's guidelines. The final exam will consist of a written test and solving a mock crime scene. The final grade for the course is computed as follows:

MP1	40%	Core Practical #1	5%
MP2	40%	Core Practical #2	5%
		Final Exam	10%

Extra credit may be offered as additional questions on quizzes/exams and will ONLY be awarded when available to the entire class. There will be NO individual extra credit assignments.

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### Course Outline

Prologue – Chapter 1: What a Forensic Scientist Does (History & Purpose of Forensic Science)

- I Crime Scene Processing
    - Chpt. 10: Crime Scene Investigation
    - Chpt. 12: The Forensic Laboratory
  - II Chpt. 17: Fingerprinting
  - III Handwriting Analysis
    - Chpt. 21: Questionable Documents
  - IV Chpt. 16: Trace Evidence (Micro-Fractures, Hair, Fibers, Glass)
  - V Impression Evidence
    - Chpt. 18: Footwear Impressions
    - Chpt. 20: Firearm & Tool Impressions (Ballistics)
    - Chpt. 6: Forensic Odontology
    - Chpt. 19: Tire & Tire Track Impressions
  - VI Chpt. 11 & 13: Forensic Serology
    - Recognition, Identification, Characteristics of Blood & Bloodstain Patterns
  - VII Forensic Application of the Social Sciences
    - Chpt. 28-29: Forensic Psychology / Psychiatry
    - Chpt. 30-31: Criminal Profiling
    - Serial Killers
- Optional
- Chpt. 22: Analysis of Controlled Substances (Forensic Toxicology)
  - Chpt. 24: Basic Fire & Explosion Investigations (Arson Investigations)
  - Chpt. 32-34: Legal & Ethical Issues in Forensic Science
  - Chpt. 2-9: Forensic Specialists

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**REMEMBER**, this class is not about blood and guts and gory pictures. This is a science class and we will investigate and discuss grown-up situations in a mature and scientific manner. While some things may make you a little queasy, the intention is not to 'gross' you out. It is to peak your interest, educate yourself, and perhaps turn you on to a new and exciting branch of science in the world.

## Student/Parent Permission Form

The Forensic Science course is a course designed to replicate techniques used by forensic scientists to analyze evidence such as blood, fiber, fingerprints, hair, and forged documents. Students will be subjected to authentic case studies within the textbook and additional resources involving graphic sexual abuse, vehicular accidents, murder, child abuse, and arson.

Students will be actively involved with these activities and will be required to provide hair and saliva, fingerprints, clothing fibers, and handwriting samples. Students must follow all rules/regulations provided on the lab safety contract. The case studies will include actual photos and video footage depicting concepts covered throughout the course. Parents and students must be aware that although many concepts may cause an emotional response, students are required to participate and complete all aspects of the curriculum. Students will be asked throughout the course to provide simple houseware items (i.e. paper and plastic bags, gloves, old clothing, etc.).

Parents and students must be aware that a student who fails to adhere to the safety regulations and active involvement of curriculum materials will receive no credit towards their grade. Failure to complete this form will forfeit the opportunity to remain enrolled in this course.

Respectfully,

Mr. J. Gable – CB South

### **Class Policy** ~ A simplified version ...

1. YOU are responsible for all missed work if you are out for any reason (absence, trip, athletic contest, etc.).
2. Hats are allowed in class ... hoods are not.
3. Cell phones will be used for documentation purposes (i.e. taking pictures of labs to incorporate into reports). Do not abuse this privilege or you will receive conduct referrals. THIS IS YOUR ONLY WARNING!
4. If you cut my class, you will get a zero for all work assigned/collected/missed on that day.
5. You will be removed from class due to immaturity and disrespect to yourself and others.

**Course Website:** You will follow the class site on CANVAS. Make yourself familiar with this right away.

*\*Your parents/guardians are welcome to also explore the site but they will need to use your login/password to access the course material.*

**Daily Preparation:** Notebook, Laptop/Tablet, Pencil, Black Pen, Your Maturity, **Your Respect, Your Attention**

**Attendance:** Daily Attendance – just being here – is critical to both your success and the success of your partner / team. As in the real-world of police work, investigators work in TEAMS. You will work in TEAMS in this class. We come as close to mimicking what happens in the real-world as often as possible. This matters from simple tasks like measuring and documenting the crime scene, searching for / collecting evidence, analyzing evidence, and reporting of crime scene reports. You WANT to be present to work with your team on these aspects. It is virtually impossible to do alone ... but if attendance and/or behavior and/or maturity becomes an issue you may be tasked to attempt to complete the above alone (*which will be very difficult*).

**Homework:** You will have homework more times out of the week than not. Homework will include answering questions or defining terms posted to my Canvas site, completing labs done in class, analyzing case studies and Forensic articles, to name a few. Since I will not assign nightly homework you are expected to complete this homework by the due date, in full, and to the best of your abilities. Most will be submitted electronically.

*\*Late penalties could include a deduction of 10% for more significant laboratory investigation to receiving half-credit for smaller learning practice assignments.*

*\*I will not accept incomplete Summative assignments.*