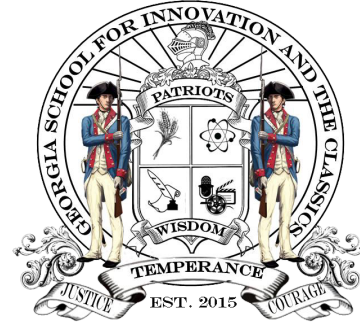


Georgia School for Innovation and the Classics

What to Expect for Forensic Science 2023-2024



Contact Information:

Teacher: Mrs. Holmes
E-mail: bholmes@gsiccharter.education
Conference by appointment only

Class Materials: Required Daily!!

1 ½ inch or 2 inch 3-ring binder with paper	charged Chromebook	
Pencils/Pens	Scientific Calculator	Colored pencils or markers
Notebook dividers (10)		

Course Description:

Forensics is a year-long course rich in exploration and lab investigation which applies many disciplines of scientific study such as biology/anatomy, chemistry, and physics to solving crimes. Along with the sciences, this course integrates math, technology, history, and political science with writing and presentation skills using real-life applications and case studies. Your experience in forensic science will be one to remember—the cases are fascinating, the labs engaging, and the content a satisfying application of all sciences studied up to this point. Plan to **actively participate** in class, complete **all assignments** thoughtfully and on time, and to **study** regularly outside of class. Forensic Science has a final exam at the end of the year which counts as 20% of the student's final grade calculation. Exam exemption is an option.....stay tuned!

Grading Scale for 9 week grading period:

- **Formative Assessments *for* learning** (quizzes, classwork, homework,).....**25%**
- **Performance Assessments** (labs, presentations).....**30%**
- **Summative Assessments *of* learning** (unit tests, projects).....**45%**

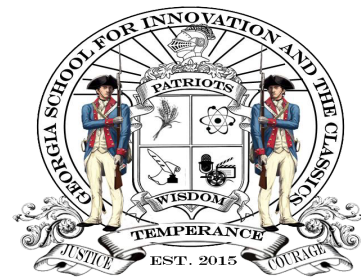
Notebook requirement: You will be expected to keep a notebook (1 ½ to 2 inch 3- ring binder) **for this class ONLY**. An organized notebook makes a great study tool!! Label your notebook dividers as follows and place them in your 3 ring binder:

Unit 1: Intro to Forensic Science	Unit 6: Fingerprints
Unit 2: Crime Scene Investigation	Unit 7: Handwriting Analysis, Forgery, Counterfeiting
Unit 3: Physical & Trace Evidence	Unit 8: Toolmarks, Firearms, Ballistics
Unit 4: Forensic Serology & DNA	Unit 9: Death: Manner, Mechanism, Cause
Unit 5: Drugs & Toxicology	Miscellaneous

Makeup work: Students should meet with me prior to an absence or immediately upon return for direction regarding missed work. **Makeup work** will be allowed within 5 days of your return to school **with an excused absence**. Make up tests will be given after school. It is **YOUR** responsibility to get **YOUR** missed work. No Makeup work will be allowed or accepted with an Unexcused Absence.

Be advised that due to the laboratory intensive nature of this course, some assignments simply cannot be made up; alternative assignments will be required if they are missed.

CLASSROOM EXPECTATIONS and STUDENT RESPONSIBILITIES for Mrs. Holmes' Forensic Science



BE ON TIME!

- Be **inside** the classroom & seated when class begins.

BE PREPARED!

- Bring your book/charged Chrome Book every day.
- No passes out of class for any reason.**
- Be ready to work when you come through the door.
- If it's a lab day, **please** remember Lab Safety and dress *properly*!

BE ON TASK!

- Pay careful, intelligent attention in class.
- Follow Lab Safety Rules and Protocol
- **NO CELL PHONES/Smart Watches/Earbuds (unless approved for a specific lesson)**
- Turn cell phones off/Turn off and remove Smart Watches during Class. Store in backpack or in designated area in the classroom. *Failure to do so will result in Consequences listed below.*
- **NO GUM, FOOD OR OPEN DRINKS! DO NOT EAT IN CLASS!**
- Bottled Water with a screw-on cap or other no-spill container is okay.
- We have so much to do, you should always be busy!
- If you are unsure of what to do, please ask.

BE RESPECTFUL!

-of others:

- No profanity or verbal abuse!
- Keep noise to a reasonable level.
- Do not talk while others are talking; raise your hand to get my attention.
- The teacher dismisses the class!

-of property:

- Do not write on your desk unless instructed to do so!
- Do not remove community property!
- Do not borrow anything that is not yours without asking first!
- Dispose of trash. There are 2 waste baskets in the classroom.

-of yourself:

- Follow the dress code as set forth in the student handbook!
- Show pride in your work!

BE SUCCESSFUL!

- Set goals and have purpose.
- You're here to learn and achieve those goals and I'm here to help you!

Consequences:

- First offense: Verbal Warning
- Second offense: Parent Contact
- Third offense: Office Discipline Referral

*For not bringing Chrome Book to Class: See Consequences listed above PLUS Zero Grade on Assignment

Georgia Standards of Excellence for Forensic Science

SFS1. Obtain, evaluate, and communicate information to properly conduct a forensic investigation of a crime scene.

- a. Construct an explanation of how scientific forensic techniques used in collecting and submitting evidence for admissibility in court have evolved over time. (*Emphasis is on Locard's Exchange Principle, Frye standard, Daubert ruling*)
- b. Plan and carry out investigations using the scientific protocols for analyzing a crime scene (e.g., search, isolate, collect, and record).
- c. Construct an argument from evidence explaining the relevance of possible evidence at the site of an investigation.
- d. Develop models to analyze and communicate information obtained from the crime scene.

SFS2. Obtain, evaluate, and communicate information on various scientific techniques to analyze physical, trace, and digital evidence.

- a. Plan and carryout an investigation to determine the value of physical and trace evidence.
- b. Plan and carryout an investigation to analyze the morphology and types of hair, fibers, soil and glass evidence in order to make a physical match examination.
- c. Use models for the evaluation of handwriting and document evidence.
- d. Analyze and interpret data to evaluate digital sources of evidence.
- e. Ask questions to determine the appropriate uses of chromatography and spectroscopy in evidence analysis.

SFS3. Obtain, evaluate, and communicate information relating to biological evidence in forensic investigations.

- a. Ask questions to investigate types of toxins, poisons, and drugs and their effects on the body.
- b. Analyze and interpret data to investigate the effects of blood alcohol content on the body.
- c. Construct an explanation to distinguish the difference between human and animal blood.
- d. Plan and carry out an investigation to analyze the physics of bloodstain patterns.
- e. Plan and carry out an investigation involving DNA processing and analysis

SFS4. Obtain, evaluate, and communicate information to analyze the role of impression evidence in order to make a physical match examination.

- a. Construct an explanation for utilizing the appropriate technique to lift and evaluate identifiable, latent, plastic and patent fingerprints. (*Classifying print and minutiae patterns*)
- b. Analyze and interpret data regarding impression evidence.
- c. Construct an explanation to support the significance of impression evidence in an investigation.

SFS5. Obtain, evaluate, and communicate information to Medicolegal Death Investigations.

- a. Ask questions to identify various causes and mechanisms of death (blunt force trauma, heart attack, bleeding, etc.).
- b. Construct an argument based on evidence that pertains to the manner of death (natural, homicide, suicide, accidental, or undetermined).
- c. Use mathematics and computational thinking to explain post-mortem changes used to determine post-mortem interval (PMI):
 - Rigor mortis • Livor mortis • Algor mortis • Gastric contents
- d. Analyze and interpret entomological data to evaluate the role insects play in decomposition and determining PMI.
- e. Plan and carry out an investigation to analyze height, sex, age, and race to develop an anthropological profile of the victim and potential perpetrator.

