Class Title: Blue Detective Science Lab

Teacher Name: Marie Jones

Class Day: Monday

Class Size: 10

Class Cost: $50

Class Fee: $96

Ages or color group served: Blue

What level is this class: Level 1

Prerequisites: No prior science experience is required. Students should be able to follow directions, participate in group activities, and handle simple materials safely. This is an active hands-on class, so students should be comfortable working with partners and participating in experiments and investigations.

Graduation Requirements: HCU attendance policy

Homework Requirements: Most work will be completed during the 55-minute class period. Occasionally, students may be assigned a brief activity at home, such as watching a short educational video related to the scientific method or learning key vocabulary (for example: hypothesis, evidence, and conclusion) to help them better understand upcoming investigations.

If a student is absent, they may also be given a simple make-up activity or video to review the experiment they missed.

Class Description:

In Detective Science Lab, students become junior investigators as they learn how real scientists help solve mysteries. Each week a new “case” is presented, and students will examine evidence, test clues, and work together to discover what really happened. Through hands-on experiments, students will explore fingerprints, mystery powders, invisible ink, secret codes, chromatography, and crime-scene analysis.

This class focuses on observation, logical thinking, teamwork, and problem-solving while introducing basic scientific concepts in a fun and engaging way. Rather than lectures or worksheets, students actively investigate and record their findings before making conclusions.

Students will practice:

• careful observation

• making predictions

• testing evidence

• recording results

• working cooperatively

• drawing conclusions based on facts

No prior science experience is required. All experiments are safe, age-appropriate, and completed during class time.

By the end of the semester, students will work together to solve a final mystery using the investigation skills they have learned throughout the course.

Week 1:

How to be a detective?

Learning how to fingerprint

Week 2:

Mystery Powders

Learning the differences between baking soda, flour, and sugar tests

Week 3:

Secret Codes

Learning how to break down messages

Week 4:

Invisible Ink

Learn how to send a message with invisible ink with 2 home ingredients

Week 5:

Footprints

Learn how to measure and place different patterns

Week 6:

Paper Chromatography

Learn how to separate ink from paper

Week 7:

Analyze handwriting

Learn how to identify a suspect by handwriting

Week 8:

Fiber Testing

Learn how to detectives use a magnifier to see fibers for a case

Week 9:

Timeline solving

Learn how patterns and behaviors in a timeline solve the case — alibi logic puzzle

Week 10:

Sound clues

Learn how to hear direction and observations

Week 11:

Mini crime scene prep for final case!

Work the case together team!!

Week 12:

Final Case

Parents are invited to watch their students solve the case and put into work all their detective skills.