

Amesbury

'CSI Amesbury' comes to schools

BY PRITI C. PRABHAKAR
STAFF WRITER

High school students learn all about crime scene investigation in a new course called "Forensic Science," in which actual crime scenes are recreated by science teacher Morgan Smyrl.

AMESBURY — A woman is found dead in a fountain outside an upscale swingers party. In a video arcade, a man is discovered dead on a table and a woman's corpse is stuffed inside a Ms. Pac Man game.

Like the show "CSI" on CBS, actors carefully collect evidence at crime scenes and link events to develop a hypothesis.

But at the Sparhawk school, there are no actors.

High school students learn all about crime scene investigation in a new course called "Forensic Science," in which actual crime scenes are recreated by science teacher Morgan Smyrl.

In analyzing evidence for one murder scene, Smyrl and the 16 students, who make up the "Investigation Team", used a vapor chamber for developing latent fingerprints with a Bunsen Burner, a beaker of water, Superglue and fingerprints on a knife, an article used in the crime scene. Students rubbed off lead from pencils and brushed it onto the knife, revealing the fingerprint.

Students then use microscopes to examine points of comparison in the fingerprints. At the beginning of the class, each student was fingerprinted as a preliminary exercise.

"The gas molecules stick to latent amino acids from the oils from the fingerprint," said Smyrl. "The lead provides high contrast

to the transparent Superglue, revealing it clearly."

Using science and the law, students learn about what constitutes evidence, which is what forensics is all about, Smyrl said.

"They learn about the constitutional doctrine as well as the legal doctrine, and spend a good deal of time studying evidence analysis grounded in real world crime scenarios."

Smyrl said that the class has just completed three out of six total crime scene investigations. Crime scenes so far have involved murder, robbery, and ballistic matches. Students learn teamwork, observation and analysis by investigating crime details. At the end of each exercise, the students come up with a hypothesis about who committed the crime based on the evidence and their findings. Smyrl then walks them through what actually happened and tells them who did it.

"I'm surprised at how good they are," said Smyrl.

"It took a while to get into the swing of being observant of the littlest details of a crime," said Vanessa Pacholok, senior. "Now, I look for things I would never look for when I observe a scene."

Trista Cronin, a senior, said her father is an investigator for the Essex County District Attorney's office.

"It's interesting to learn what my father does for a living as well as what things you see on television actually mean," said Cronin.

In certain crime scenes, if blood is splattered, the students are educated about splatter points, which help them link the order of events that took place during a crime. In addition to splatter points, they also learn about the physics of crimes.

Before beginning to investigate a crime scene, students get a report generated by eyewitnesses at the scene of the crime. They then go into the scene and collect evidence.

"The students learn that their responsibilities are to carefully observe the evidence and collect it in a methodical manner," said Smyrl.

Smyrl said he created the course this year after working as a science technician for about 11 years. He has an avid interest in forensic science as well as television shows such as "CSI" and "Cold Case Files." Many of the crime scenes he uses in the course

come from actual shows or from the Boston Museum of Science Web site.

The course goes hand in hand with the school's theme this semester, American Civics and Law. Each semester at Sparhawk is 13 weeks.

"As part of the Sparhawk philosophy, teachers are able to create their own curriculum," said Smyrl. "It goes to show that if teachers enjoy what they teach, it shows."

A similar course will be piloted at the Amesbury High School, led by chemistry teacher Nina Tassinari and English teacher Steve Bastien.

According to Tassinari, the English component of the course will consist of reading mysteries written by authors from Edgar Allan Poe to Stephen King. Students will complete basic lab work such as fingerprinting and use deductive reasoning skills to create a mystery, based on evidence gathered at a crime scene.

The chemistry component will involve students understanding and implementing the scientific method to practice problem solving skills, perform an analysis of a crime scene to draw logical conclusions including blood group and handwriting analysis.

Finally, students will report these results to fellow investigators and prepare a report on their findings. The joint chemistry and English course will be available to students early next year.