



CSI: The Forensic Science Program at Michigan State University

June 17—23, 2012



Audience: This one-week summer program is for both residential students currently in grades 7—9 and at least 12 years old. Twenty-three (23) students participated in the 2012 CSI program; 19 female/4 male.

All students are required to have a GPA of 3.5 or above. They had to provide strong standardized test scores (SAT, ACT, Tier I MEAP in Science) as well as a positive teacher recommendation.

Funding: The residential program tuition of \$1,250 covers all program costs. Scholarships are available to students who qualify for free or reduced lunch. The scholarships pay up to 50% of the program tuition. The funds are provided through the interest earned from the Dorothy Lawshe Endowment.

Objectives: Students participating in this program receive opportunities to explore various aspects of forensic science through lab and/or hands on experiences during 40 hours of contact time. Through this exposure to forensic science, it is hoped that students will continue to pursue their interests or develop an interest resulting in, ultimately, a career choice.

The expectation for each student is to be able to:

- *describe the value of a wide variety of types of evidence,
- *collect evidence properly through an understanding of how crime scene documentation, photography and chain of custody work,
- *understand the various opportunities available for a career in forensic science.

Description: The curriculum for this program is geared to academically-able students with strong backgrounds in science, who are interested in working with professionals in the field of forensic science. Three years of forensic science curriculum have been developed as so many students participate in the program for several years. Each day's curriculum focuses on one area of forensics. Students participate in lectures, lab experiences, and mock crime scenes. While collecting evidence from crime scenes, they analyze their findings in the laboratory and ultimately present their conclusions at the end of the program.

Instruction is provided by two (2) MSU full time Professors, one (1) MSU Graduate Instructor, five (5) Graduate Teaching Assistants and six (6) forensic science experts. Evenings activities include a college night presentation from the Honors College and the MSU Forensic Club, use of campus facilities, team building activities and completing daily homework assignments implementing a MSU computer lab.

Outcomes: Each student participated in 17 areas of forensic science followed with hands-on lab activities. The students completed lab analysis on a crime scene and then presented their findings and conclusions on the final day of the program, using their documented evidence.

Curriculum included an introduction to forensics, crime scene documentation, forensic analysis of blood evidence, fingerprinting, controlled substances, trace evidence, impression evidence, pathology, forensic art, crime scene documentation, handwriting analysis, expert witness testimony, bloodspatter stringing and evidence collection at crime scenes, pathology, pig autopsy, firearms and tool marks, law/legal issues/testifying, arson investigation, and a rescue and cadaver dog demonstration/lecture led by their volunteer owner/trainers. Student survey results indicated that the pathology lecture/lab with a pig autopsy and the lecture on blood analysis as the favorite lectures/labs.

Least favorite lecture was expert witness testimony, least favorite lab was fingerprinting.

Prior to participating in this program, 94% of the students were considering a career in forensic science, after the program 74% were considering careers in some area of forensic science. Student responses, when asked what they liked most about the program included:

"The thing I liked most about this program was how we got professional views on the crime scene. We also got many different views about one job and were taught about many jobs in the field of forensic science. I really liked how the 'teachers' connected and helped us learn."

"I liked the hands-on activity. The labs were geared toward our age group. I always felt included. The staff was always ready to help. Plus they were all well equipped." This is the fifth year of the program. One student had participated in the program in 2011, returning for 2012. One student has participated in GATE's CHAMP program.

Additional Significant Information:

Most of the presenters return each year to work with this program.

To view a CSI@MSU video, go to <http://www.youtube.com/watch?v=usmtSmJ0-wk>

Contact Information:

Kathee McDonald, Director
Office of Gifted and Talented Education

186 Bessey Hall
Michigan State University
East Lansing, MI 48824
Phone: 517.432.2129 Email: gifted@msu.edu
Program website: <http://gifted.msu.edu/programs/csi-forensic-science-program>

MICHIGAN STATE
UNIVERSITY

Honors College

