

Forensic Science

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CRIME SCENE – DO NOT CROSS – CRIME SCENE – DO NOT CROSS – CRIME SCENE

Course Description:

Forensic science is the application of science to law. It is a multidisciplinary science that utilizes principles from chemistry, physics, Earth science, and biology. This course will involve the application of scientific methodology and technology to the analysis of crime scenes, both in hands-on laboratory activities, as well as in discussions, simulations, and case studies. Students will first learn specific lab techniques, such as chromatography, DNA analysis, and fingerprinting, and then they will use this knowledge to investigate mock crime scenes.

Major Topics Covered:

- Introduction to Forensic Science and the Crime Scene
- Physical Evidence
- Forensic Anthropology, Odontology, and Entomology
- Fingerprinting
- Forensic Serology (Blood Typing and Blood Spatter)
- DNA Analysis
- Hairs, Fibers, and Paint
- Document and Voice Examination
- Other topics as time allows

Learner Outcomes:

Upon completion of this course, students will have an understanding of how forensic scientists process the evidence from crime scenes and how forensic evidence plays a role in politics and law. Students will most often work in small cooperative groups to solve problems, teaching them teamwork and problem solving skills. In addition, students will develop skills needed to interpret and communicate the results of laboratory investigations to others, both orally and in written reports.

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Standards Covered: This course covers a combination of national and state science standards, as well as content-area language arts standards.

MCA Test Preparation: Students will learn strategies for reading and interpreting scientific articles and be required to complete scientific article analyses. Students will also learn technical writing skills and be required to complete laboratory research reports. Students will use math regularly in analyzing evidence and graphing results.

Modes of Instruction:

- Laboratory Investigations
- Mock Crime Scene Investigations
- Guest Speakers
- Case Studies

- Classroom Discussions
- Teacher Lectures
- Textbook Readings
- Videos and DVDs
- Internet Activities & WebQuests

Materials Used:

- Text: *Criminalistics: An Introduction to Forensic Science, 8th Edition, Richard Saferstein, Prentice-Hall, New Jersey, 2004.*
- Newspaper and Magazine Articles
- News Broadcasts on Current Events in Forensic Science
- Forensic Science Websites
- Videos and DVDs: Court TV's Forensic Files

Discovery Channel Forensic Science Specials

Select CBS's CSI Episodes

PBS's NOVA Science Videos and DVDs Discovery Health's *Dr. G: Medical Examiner*

Miscellaneous Scientific Equipment

If a student or his/her parent has questions regarding any of the materials or subjects covered in this class, please contact the instructor to set up a meeting to discuss curriculum or arrange for alternative assignments

Attendance:

Students will abide by PCHS attendance policy, as outlined in the Dragon Handbook. If an absence is excused or school authorized, students may make up missed work for credit. Students must make arrangements ahead of time so that the necessary materials are available at the time you come in to make up the work. If an absence is unexcused, you will not be given the opportunity to make up missed work. It is the responsibility of the student to make up missed work and time.

Tardies – You will be allowed **one** unexcused tardy per quarter without consequence. Every tardy beyond one will result in the assignment of lunchtime detention.

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Assessment and Grading:

The following grading scale will be used:

100-94%	Α	83-80%	B-	69-68%	D+
93-90%	A-	79-78%	C+	67-64%	D
89-88%	B+	77-74%	С	63-60%	D-
87-84%	В	73-70%	C-	59-0%	F

Grades will be determined from the following types of assessment:

- <u>Daily Work (50%)</u> Daily assignments include participation in labs, current events, vocabulary and other bookwork, questions regarding lab work and class discussions.
- Tests, Quizzes, Lab Reports and Special Projects (50%) Following some
 laboratory activities, students will complete a laboratory write-up, outlining the
 procedures used and explaining results and conclusions. Students may also be
 required to present their findings from a lab or other activity to the class. Quizzes
 may be either announced or unannounced. Unit tests will be announced at least
 three days in advance.
- <u>Final Exam</u> At the conclusion of the course, there will be a final exam. Students may use any information they have in their science notebooks on the exam.

Assignments must be turned in on time for credit. No late work will be accepted. If a student is absent on the date an assignment is due, the student will be expected to turn it in when she/he returns to school. If a student is absent on the day an assignment is assigned, she/he will have 2 extra days to complete the assignment.

Lab, test, and quiz make-up due to absence: It is the responsibility of the student to arrange a time within *one week* of the absence to make up laboratory activities, tests, and quizzes.

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Classroom Expectations:

- 1. Be Prompt and Prepared be in your seat and working when bell rings
- 2. Be Respectful no foul language, no foul language, no cell phones or other electronic devices unless directed to use.
- 3. Be Attentive and Alert especially during labs!
- 4. Be Safe follow safety procedures, wear safety goggles, no foods or beverages!

Consequences:

If a student chooses not to follow classroom procedures and expectations, she/he will receive one warning. If a student chooses to continue acting inappropriately, the following may occur per the teacher's discretion: removal from lab, removal from class, conference with teacher and student, lunchtime detention, phone call to parent, conference with parent, held after class, new seat assignment. Repeated inappropriate or disruptive behavior will lead to consequences that will be determined by the teacher.

No warnings will be given for cell phone or ipod use. If a cell phone or ipod is seen, it will be confiscated and taken to the office to be picked up at a later time.

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The student must accept responsibility for her/his own learning in this course. Forensic Science is meant to challenge the student in a fun and meaningful way. I will provide many opportunities for you to be successful and will support your learning in every way I can, but the first line of success belongs to you, the student.

If you have any questions about this course now or in the future, please feel free to contact me at the phone number or email address listed below. You will also find useful information on my webpage: http://potvinpchs.weebly.com. I am looking forward to a semester of solving crime with you!

Ms. Potvin apotvin@pinecity.k12.mn.us 320-629-4182

Detach and return bottom portion. Keep re	mainder for future reference.
By signing below, I acknowledge that I have expectations of Forensic Science at Pine C	ve read and agree to the basic guidelines and City High School.
Student Signature	Parent Signature
Parent email (if available):	