

# Forensic Science

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## **Course Description**

Forensic Science is a lecture/lab-based science class designed for students who are interested in forensic science. The purpose of this course is for students to gain experience in the major investigative techniques currently used by forensic scientists and crime scene investigators, and to develop an understanding of the scientific concepts which serve as the basis for these techniques.

## **Topics/Units may include but are not limited to:**

- Observation Skills
- Crime Scene Investigation
- Evidence Collection
- Hair Analysis
- Fiber Analysis
- Document Analysis
- Handwriting Analysis
- Fingerprint Analysis
- Blood Evidence
- Forensic Anthropology
- Casts and Impressions
- Ballistics

## **Standards**

AZ. Academic Science Grade Level Expectations addressed in Forensic Science:

- Newton's laws of motion and gravitation describe the relationships among forces acting on and between objects, their masses, and changes in their motion – but have limitations
- Matter has definite structure that determines characteristic physical and chemical properties
- Matter can change form through chemical or nuclear reactions abiding by the laws of conservation of mass and energy
- Atoms bond in different ways to form molecules and compounds that have definite properties
- Physical and behavioral characteristics of an organism are influenced to varying degrees by heritable genes, many of which encode instructions for the production of proteins

- Cellular metabolic activities are carried out by biomolecules produced by organisms

### **Assessments**

- Homework (15%): Crime article summaries, case studies
- Laboratory Work (40%): Participation, lab notebook, lab reports, article reviews
- Projects (15%): Powerpoint presentations, mystery cases
- Test/Quiz (15%)
- Final Exam (15%)
  - Total = 100%

### **Course Grades**

Grades will be updated regularly on family link. The grading scale is as follows:

- A = 89.5-100%
- B = 79.5-89.4%
- C = 69.5-79.4%
- D = 59.5-69.4%
- F = 59.4 and below

### **General Classroom Guidelines**

1. Give your best effort. Come to class prepared with all materials, pay attention and be involved in class activities, and complete all assignments on time.
  2. Be in your seat and ready to work when the bell rings.
  3. Respect other people and their property. Listen when others are talking; no putdowns or profanity; be polite to teacher and students; do not write on desks or chairs; return borrowed property. Following this rule will help maintain a positive learning environment.
  4. Class disruptions will not be tolerated. (Examples: Talking, getting up out of your seat to throw away trash, throwing things across the room, or sharpening your pencil while I am talking.)
  5. If it does not relate to science, leave it in your locker. This includes personal grooming items (comb, brush, makeup, etc.), MP3 players and homework from other classes.
- Late work: Class or homework assignments will be given. Assignments must be turned in on time for full credit. One day late will be graded for 75% of graded total, two days 50% of graded total. Work more than two days late will not be accepted.
  - Absences: If your absence is excused, you will be given 2 days to make up the assignment for full credit
    - If you are absent on the day of a lab, you must complete an article summary as an alternate assignment. The make-up assignment must be turned in within 1 week.

- Cheating policy: Any copying or cheating will cause your grade to be recorded as a "0" for that assignment with no chance to make it up and your parent will be contacted. This includes daily assignments, labs, projects, quizzes and tests.

### **Course Materials**

- Supplies: Spiral Notebook (for notes and lab reports); Folder (for worksheets, homework, study guides, handouts), pencils and/or pens (blue or black ink only)