



Spy Science 3-4 Syllabus

Course Goals

1 Investigation

Students learn the basics of investigating a subject and forensics in the lab.

2 Coding

Students learn about different methods used to keep information secret.

3 Surveillance

Students learn simple methods to surveil and apply these methods.

4 Subterfuge

Students learn about going undercover and the role of double agents.

Course Topics

1 Espionage

Students learn about and discuss government spy agencies, their roles, and where they operate.

2 Bugging

Students learn about bugging and the use of technology in spycraft.

3 Covers and Disguises

Students learn about disguising themselves as a different person in order to create and maintain a cover.

4 Eyewitnesses

Students learn the importance of eyewitnesses in spying, and how inaccurate they can sometimes be.

5 Ciphers

Students learn about the use of ciphers and make their own ciphers to code information.

6 Morse Code

Students learn about Morse Code and how it can be used in spying to conceal information and get an important message across. Even though it is commonly known amongst spies, unless it is known that a person is sending a message in Morse Code it is hard to translate.

7 Forgery

Students learn about the use of forged documents among spies, and how they can be used to gain access to privileged information.

8 Handwriting

Students learn the basics of handwriting analysis and ways to determine who wrote a document.

9 Ink Chromatography

Students learn about identification of the components of ink and analyze ink from different types of pens.

10 Fingerprint Patterns

Students learn about the different types of fingerprint patterns among humans: whorls, arches and loops.

11 Mystery Powder Identification

Students learn how powders can be identified through a series of chemical tests.

12 Tool Impressions

Students discuss different methods of analyzing what tool was used to commit a crime.

13 Periscopes

Students learn about covert methods of surveillance including the use of the periscope to see around corners.

Course Schedule

Day 1

Introduction and Icebreakers

Students get to know their instructor and one another.

Vocabulary

Students learn important spy vocabulary for use during the course.

Vocabulary Games

Students reinforce their vocabulary daily using games to help them master the material.

Spies in Real Life

Students discuss what types of jobs spies have as a cover and learn about how it's not always glamorous.

Disguises

Students learn about potential methods of disguising themselves from others.

Make your own disguise

Students make their own disguises using cutouts.

Stories

Students are read various spy stories at the end of each day.

Day 2

Ciphers

Students learn about the significance of ciphers and encryption in relation to spy craft. Real life examples are applied.

Bugging

Students practice bugging and de-bugging a room.

Vocabulary Games

Students reinforce their vocabulary daily using games to help them master the material.

Stories

Students are read various spy stories at the end of each day.

Day 3

Cyber Security

Students learn about the significance of and then practice making strong, secure passwords.

Forgery

Students discuss the use of forged documents in spycraft and making covers.

Handwriting Analysis

Students analyze their handwriting and the handwriting of classmates while trying to determine who forged the secret note!

Forged Grades

Students analyze a teacher's gradebook where some of the grades were altered. They figure out which students changed their grade, what the original grade was, and what they changed it to.

Vocabulary Games

Students reinforce their vocabulary daily using games to help them master the material.

Stories

Students are read various spy stories at the end of each day.

Day 4

Periscopes

Students learn about periscopes, make their own, and practice using them.

Spying

Students practice spying and seeing around corners using their periscopes.

Invisible Ink

Students write their own messages using invisible ink.

Vocabulary Games

Students reinforce their vocabulary daily using games to help them master the material.

Stories

Students are read various spy stories at the end of each day.

Day 5

Alarms

Students practice building their own alarms to catch someone who is trying to steal information.

Recording

Students use digital recorders to capture information. They also learn how sound can be amplified using tools around the house.

Vocabulary Games

Students reinforce their vocabulary daily using games to help them master the material.

Stories

Students are read various spy stories at the end of each day.

Day 6

Lasers

Students learn about the use of lasers for alarms and burglary prevention.

Mad Libs

Students practice their spy vocabulary using mad libs.

Mystery Powders

Students are introduced to chemical methods of identifying powders left behind at crime scenes.

Vocabulary Games

Students reinforce their vocabulary daily using games to help them master the material.

Stories

Students are read various spy stories at the end of each day.

Day 7

Fingerprints

Students learn about the importance of fingerprint identification in finding a suspect or a source. Databases of fingerprints are discussed as well as hacking into databases to steal information.

Finger Print Identification

Students practice analyzing fingerprints and determine what types of fingerprints they have.

Who-Dunnit?

Students try to determine who committed a crime using their fingerprints.

Blown Up Fingerprints

Students study their own fingerprints in larger than life size using balloons.

Vocabulary Games

Students reinforce their vocabulary daily using games to help them master the material.

Stories

Students are read various spy stories at the end of each day.

Day 8

Tool Impression Analysis

Students learn how to distinguish marks from different tools that were used to break into spy headquarters.

Mad Libs

Students practice their spy vocabulary using mad libs.

Ink Chromatography

Students learn how to identify various inks and learn about their components using chromatography.

Vocabulary Games

Students reinforce their vocabulary daily using games to help them master the material.

Stories

Students are read various spy stories at the end of each day.

Day 9

Other codes

Students learn about other forms of ciphers not previously discussed including the pigpen cipher, and numerical substitution.

Mad Libs

Students practice their spy vocabulary using mad libs.

Review

Students review the material they've learned in the course for use in the final activity.

Vocabulary Games

Students reinforce their vocabulary daily using games to help them master the material.

Stories

Students are read various spy stories at the end of each day.

Day 10

Final Activity

Students use the information they've learned in the class to complete their spy mission and become licensed spies.

Morse Code

Students practice their skills to decode a Morse code clue during their mission.

Spy Licensing

Students become licensed spies!

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