**PACE CHART FALL 2017 (16 WEEKS) FORENSIC SCIENCE SEGMENT 1- (COHORT 2)**

NOTE: Make sure to put "check" marks by each assignment you complete and feel free to print this out so you can keep yourself on pace to avoid being withdrawn by the "GRACE PERIOD" date*. Please also note that all assignments in GREEN are the only assignments you turn in!*

|  |  |  |
| --- | --- | --- |
| **DATE** | **WEEK** | **ASSIGNMENTS TO COMPLETE** |
| 8/23/2016 | 1 | 01.00 Introduction to Forensic Science |
|  |  | 01.01 Do You Suffer From the "CSI effect?" |
|  |  | 01.02 Forensic Science |
|  |  | 01.03 The History of Forensic Science |
|  |  | 01.04 Forensics and the Legal System |
|  |  | 01.05 Other Forensic Sciences |
|  |  | 01.06 Review and Critical Thinking |
|   |   | 01.07 Lab Questions |
|   |   | 01.08 Discussion Questions |
| 8/30/2016 | 2 | 01.09 Quiz Review |
|   |   | 01.10 Introduction to Forensic Science |
|  |  | 02.00 The Crime Scene |
|  |  | 02.01 The Crime Scene |
|  |  | 02.02 Evidence |
|  |  | 02.03 Recording the Scene |
|  |  | 02.04 Searching for Evidence |
|  |  | 02.05 Submitting Evidence |
|   |   | 02.06 Review and Critical Thinking |
| 9/6/2016 | 3 | 02.07 Lab Questions |
|   |   | 02.08 Discussion Questions |
|  |  | 02.09 Quiz Review |
|   |   | 02.10 The Crime Scene |
|  |  | 03.00 Physical Evidence |
|  |  | 03.01 Physical Evidence |
|  |  | 03.02 Types of Evidence |
|  |  | 03.03 Comparing the Evidence |
|  |  | 03.04 Soil and Impressions |
| **9/19/2016** |  | **GRACE PERIOD DEADLINE** |
| 9/20/2016 | 4 | 03.05 Review and Critical Thinking |
|   |   | 03.06 Lab Questions |
|   |   | 03.07 Discussion Questions |
|  |  | 03.08 Quiz Review |
|   |   | 03.09 Physical Evidence 04.00 Physical Evidence: Hair, Blood, and Fingerprints |
|  |  | 04.01 Physical Evidence: Hair, Blood, and Fingerprints |
|  |  | 04.02 Hair |
|  |  | 04.03 Blood Evidence |
|  |  | 04.04 Fingerprints |
| 9/27/2016 | 5 | 04.05 Review and Critical Thinking |
|   |   | 04.06 Lab Questions |
|   |   | 04.07 Discussion Questions |
|  |  | 04.08 Quiz Review |
|   |   | 04.09 Physical Evidence - Hair, Blood, and Fingerprints |
| 10/4/2016 | 6 | 04.10 Discussion-Based Assessment |
|   |   | 04.11 Segment One Midterm 05.00 Firearms and Tool Marks |
|  |  | 05.01 Is It Self-Defense or Murder? |
|  |  | 05.02 Collecting and Preserving Firearm Evidence |
|  |  | 05.03 Gunpowder Residue Analysis |
|  |  | 05.04 Tool Mark Analysis |
|   |   | 05.05 Review and Critical Thinking |
| 10/11/2016 | 7 | 05.06 Lab Questions |
|   |   | 05.07 Discussion Questions |
|  |  | 05.08 Quiz Review |
|   |   | 05.09 Firearms and Tool Marks 06.00 Human Remains |
|  |  | 06.01 Human Remains |
|  |  | 06.02 Determining Time of Death |
|  |  | 06.03 The Forensic Autopsy |
|  |  | 06.04 Human Remains at the Crime Scene |
| 10/18/2016 | 8 | 06.05 Review and Critical Thinking |
|   |   | 06.06 Lab Questions |
|   |   | 06.07 Discussion Questions |
|  |  | 06.08 Quiz Review |
|   |   | 06.09 Human Remains 07.00 DNA Evidence |
| 10/25/2016 | 9 | 07.01 DNA Evidence |
|  |  | 07.02 The History of DNA in Forensic Science |
|  |  | 07.03 Collecting and Preserving DNA Evidence |
|  |  | 07.04 Techniques Used for DNA Typing |
|  |  | 07.05 Mitochondrial DNA |
|   |   | 07.06 Review and Critical Thinking |
|   |   | 07.07 Lab Questions |
|   |   | 07.08 Discussion Questions |
|  |  | 07.09 Quiz Review |
|   |   | 07.10 DNA Evidence 08.00 Arson and Explosion Evidence |
| 11/1/2016 | 10 | 08.01 Arson and Explosion Evidence |
|  |  | 08.02 Forensic Science and the Fire Science |
|  |  | 08.03 Collecting and Preserving Arson Evidence |
|  |  | 08.04 Explosives |
|  |  | 08.05 Collecting and Analyzing Explosion Evidence |
|   |   | 08.06 Review and Critical Thinking |
|   |   | 08.07 Lab Questions |
|   |   | 08.08 Discussion Questions |
| 11/8/2016 | 11 | 08.09 Quiz Review |
|   |   | 08.10 Arson and Explosion Evidence |
|   |   | 08.11 Discussion-Based Assessment |
|   |   | 08.12 Segment One Exam |
| **11/15/2016** | **12** | **COURSE ENDS** |

**LEARNING GOALS FOR FORENSIC SCIENCE SEG 1**

**MODULE 1:** Students will be introduced to forensic science. Students will discuss what forensic science consists of and how the field developed through history. Students will learn about some of the responsibilities of forensic scientists and about some of the specialty areas that forensic scientists may work in.

**MODULE 2:** Students will discover some of the techniques and practices that forensic scientists and law enforcement officials use to identify evidence and collect that evidence in a way that maintains the integrity of the evidence. You will also learn about some of the different types of evidence that might be found at a crime scene and how the different types of evidence may best be handled.

**MODULE 3:** Students will discuss the physical evidence found at crime scenes. In doing so, they will examine the different types of evidence that are used in a crime investigation and in court trials. They will also discuss how forensic scientists and investigators identify and collect evidence. Finally, they will look at some specific examples of physical evidence, including glass, soil, and impressions, to see how forensic scientists identify and analyze these types of evidence.

**MODULE 4:** Students will examine three potentially important types of physical evidence: hair, blood, and fingerprints. For each of these types of evidence, they will look at how the evidence may be collected and how the evidence might be tested. They will also discuss some of the challenges in examining these types of evidence and what we might learn from them.

**MODULE 5:** Students will discuss the collection and analysis of firearm and tool evidence. They will learn some of the considerations in collecting this type of evidence. They will also examine what information forensic scientists can learn from evidence like firearms, bullets, gunpowder residue, and tool marks that are left at a crime scene. Finally, they will discuss under what conditions individual characteristics might be found on these types of evidence.

**MODULE 6:** Students will learn more about how forensic scientists examine human remains and gain information from these remains. They will discuss some of the ways that forensic scientists try to determine the time of death for recovered human remains. They will also discuss how forensic scientists make use of the forensic autopsy to gain more information about a probable cause of death and mechanism of death. Finally, they will discuss what scientists can learn about the condition of bones found at a crime scene and some of the ongoing research by forensic scientists to learn more about rates of decomposition.

**MODULE 7:** Students will discuss what DNA is and how it is used as evidence in crime investigations. They will examine the basic components of DNA and learn what makes the DNA of each person unique. The module will also discuss how biological evidence, like blood or hair samples, is preserved for DNA testing. Finally, they will examine the use of DNA evidence in court cases and some of the considerations that occur in these cases.

**MODULE 8:** Students will discuss how forensic science approaches crime scenes in which fire or explosions have occurred. In doing so, we will learn about the challenges that these crime scenes present in the collection of evidence, the methods used to determine the point of ignition, and how evidence is collected and preserved at arson scenes. They will also examine some of the different types of explosives and how explosive materials are collected and preserved.
​