Almont High School **FORENSIC SCIENCE** Pacing Guide

2016-17

Months	SEPTEMBER				OCTOBER				NOVEMBER				DECEMBER				JANUARY				FEBRUARY				MARCH				APRIL				MAY				JUNE	
Week #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
	SEMESTER 1 **Unit 1: Introduction** -What is forensic science? -Forensic science A to Z (vocabulary starter) -Forensic science umbrella of scientific disciplines -History of FS **Unit 2: Personal Identity** -Bertillionage -Anthopometry -The Will & William West Case -F. A. C. E. S. Composite program -Modern day biometrics -Autopsy **Unit 3: Investigating the Scene** -It's all about the details -Preserving the integrity of the scene -It's all about the details -Preserving the integrity of the scene -Timing of proces-First responder -Securing the scene -Sketch/Photograph -Search method -Evidence identification and collection				-Evidence packaging -Evidence analysis -Processing protocol **Unit 4: Evidence** -Let evidence speak the truth -Locard's principle -What evidence is relevant to the case? -Classification -Physical versus non-physical -Direct versus circumstantial -Individual versus class -Chain of custody -Evidence analysis -Processing protocol **Unit 5: Fingerprints** -History of fingerprints -Fetal development of friction ridges -Friction ridge patterns individual to person -Loop, arch, whorl -Fingerprint minutiae -Standards of fingerprint comparison -Plastic or latent prints -Dusting and lifting prints -Fuming for prints -AFIS & IAFIS				**Unit 6: Impression Evidence** -Footwear: Individual or Class characteristics? -Casting impressions -Shoe tread database -Tire treads -Tire tread database -Inking tire treads for comparison -Tread casts -Tool markings -Bite mark analysis **Unit 7: Hair and Fibers** -Microscopy in FS -Phases of hair growth -Hair anatomy -Mammal hair comparison -Hair alteration -Residual drug content -Hair DNA analysis **Unit 8: DNA Typing** -Individual to person -Cellular DNA - Sources of DNA -Collection and preservation of DNA -DNA analysis RFLP's, PCR, & STR's				**Unit 9: Arson** -What is a fire? -Incendiary fire -Fire investigation -Fire causes -Point of origin -Fire scene evidence -Role of accelerants -Fire scene evidence analysis -New York arson penal code -Explosions and bombing **Unit 10: Ballistics** -Types of forearms -Rifling -Ammunition size and barrels -Firearm evidence -Crime scene processing -Distance of fire determination -Shot patterns -Gun shot residue -Tool marks **Unit 11: Drug Scene Investigation** -Online activity that examines 5 different case studies. Students analyze case studies to determine the drug that was abused in each scenario, how clinical tests confirmed the drug				**EXAM: Crime Scene in a Box** -Final assessment group project. -Students model a crime scene in miniature, create a crime scene idea, write a police report that gives some but not all details of the scene including persons of interest, eyewitness testimony, and what was discovered at the crime scene. Evidence is carefully planned and modeled in the scene. **SEMESTER 2** **Unit 1: Introduction** -What is forensic science? -Forensic science A to Z (vocabulary starter) -Forensic science umbrella of scientific disciplines -History of FS **Unit 2: Personal Identity** -Bertillionage -Anthopometry -The Will & William West Case				**Unit 3: Investigating the Scene** -It's all about the details -Preserving the integrity of the scene -It's all about the details -Preserving the integrity of the scene -Timing of proces-First responder -Securing the scene -Sketch/Photograph -Search method -Evidence identification and collection -Evidence packaging -Evidence analysis -Processing protocol **Unit 4: Evidence** -Let evidence speak the truth -Locard's principle -What evidence is relevant to the case? -Classification -Physical versus non-physical -Direct versus circumstantial -Individual versus class -Chain of custody -Evidence analysis -Processing protocol **Unit 5: Fingerprints** -History of fingerprints -Fetal development of				-Loop, arch, whorl -Fingerprint minutiae -Standards of fingerprint comparison -Plastic or latent prints -Dusting and lifting prints -Fuming for prints -AFIS & IAFIS **Unit 6: Impression Evidence** -Footwear: Individual or Class characteristics? -Casting impressions -Shoe tread database -Tire treads -Tire tread database -Inking tire treads for comparison -Tread casts -Tool markings -Bite mark analysis **Unit 7: Hair and Fibers** -Microscopy in FS -Phases of hair growth -Hair anatomy -Mammal hair comparison -Hair alteration -Residual drug content -Hair DNA analysis				**Unit 8: DNA Typing** -Individual to person -Cellular DNA - Sources of DNA -Collection and preservation of DNA -DNA analysis RFLP's, PCR, & STR's -Mitochondrial DNA -CODIS **Unit 9: Arson** -What is a fire? -Incendiary fire -Fire investigation -Fire causes -Point of origin -Fire scene evidence -Role of accelerants -Fire scene evidence analysis -New York arson penal code -Explosions and bombing				**Unit 10: Ballistics** -Types of forearms -Rifling -Ammunition size and barrels -Firearm evidence -Crime scene processing -Distance of fire determination -Shot patterns -Gun shot residue -Tool marks **Unit 11: Drug Scene Investigation** -Online activity that examines 5 different case studies. Students analyze case studies to determine the drug that was abused in each scenario, how clinical tests confirmed the drug use, symptoms presented, affect on the brain, and treatment.				**EXAM: Crime Scene in a Box** -Final assessment group project. -Students model a crime scene in miniature, create a crime scene idea, write a police report that gives some but not all details of the scene including persons of interest, eyewitness testimony, and what was discovered at the crime scene. Evidence is carefully planned and modeled in the scene.	

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			-Mitochondrial DNA -CODIS	use, symptoms presented, affect on the brain, and treatment.	-F. A. C. E. S. Composite program -Modern day biometrics -Autopsy	friction ridges -Friction ridge patterns individual to person				