Northview High School

HIGH SCHOOL COURSE SYLLABUS

COURSE TITLE.....Forensic Science **TERM 2017-2018**
TEACHER .....Coach Bo Lumpkin **ROOM #.....104**

Email Address	lumpkin@fultonschools.org lumpkin@fcsgaonline.org
Teacher Support (Help sessions etc.)	Help sessions are available before school by appointment in Room 104

COURSE DESCRIPTION

All students will be expected to show proficient knowledge and skills in each area of this course as defined by the State of Georgia standards for Forensic Science
Prerequisites: Biology, Chemistry and Physics or Physical Science.

COURSE CURRICULUM CONTENT

The entire list of Academic, Knowledge and Skills for each of the following curriculum strands in this course can be accessed through the state web address at https://www.georgiastandards.org/standards/Georgia%20Performance%20Standards/Forensic%20Science.pdf

Forensic Science Curriculum The Georgia Performance Standards are designed to provide students with the knowledge and skills for proficiency in science. The Project 2061's *Benchmarks for Science Literacy* is used as the core of the curriculum to determine appropriate content and process skills for students. The GPS is also aligned to the National Research Council's *National Science Education Standards*. Technology is infused into the curriculum. The relationship between science, our environment, and our everyday world is crucial to each student's success and should be emphasized. The performance standards should drive instruction. Hands-on, student-centered, and inquiry-based approaches should be the emphasis of instruction. This curriculum is intended as a required curriculum that would show proficiency in science, and instruction should extend beyond the curriculum to meet the student needs. The hands-on nature of the science curriculum standards increases the need for teachers to use appropriate precautions in the laboratory and field. The guidelines for the safe use, storage, and disposal of chemicals must be observed. Safety of the student should always be foremost in science instruction. Science consists of a way of thinking and investigating, and includes a growing body of knowledge about the natural world. To become literate in science, therefore, students need to acquire understandings of both the **Characteristics of Science** and its **Content**. The Georgia Performance Standards for Science require that instruction be organized so that these are treated together. Therefore, **A CONTENT STANDARD IS NOT MET UNLESS APPLICABLE CHARACTERISTICS OF SCIENCE ARE ALSO ADDRESSED AT THE SAME TIME.** For this reason they are presented as co-requisites. An explanation of the coding of the science GPS is attached. This Performance Standards document includes four major components. They are: **The Standards for Georgia Science Courses.** The Characteristics of Science co-requisite standards are listed first followed by the Content co-requisite standards. Each Standard is followed by elements that indicate the specific learning

goals associated with it. **Tasks that students should be able to perform during or by the end of the course.** These tasks are keyed to the relevant Standards. Some of these can serve as activities that will help students achieve the learning goals of the Standard while others can be used to assess student learning. Many of these tasks can serve both purposes. **Samples of student work.** As a way of indicating what it takes to meet a Standard, examples of successful student work are provided. Many of these illustrate how student work can bridge the Content and Characteristics of Science Standards. The Georgia DOE Standards web site will continue to add samples as they are identified and teachers are encouraged to submit examples from their own classroom experiences.

Forensic Science The Forensic Science curriculum is designed to build upon science concepts and to apply science to the investigation of crime scenes. It serves as a fourth year of science for graduation and may serve in selected Career Technology programs. Students will learn the scientific protocols for analyzing a crime scene, how to use chemical and physical separation methods to isolate and identify materials, how to analyze biological evidence and the criminal use of tools, including impressions from firearms, tool marks, arson, and explosive evidence.

Major Concepts/Skills	**Concepts/Skills to Maintain**
Collection & recording of data	Characteristics of Science
Legal roles & duties of investigators	Records investigations clearly and accurately
Extrapolation of evidence	Uses scientific tools
Physical & chemical separation	Interprets graphs, tables, and charts
Chemical analysis	Writes clearly
Physical analysis	Uses proper units
Biological analysis	Organizes data into graphs, tables, and charts
Toxicology/serology	Analyzes scientific data via calculations and inference
Anthropology of crime scene	Uses models
Entomological techniques	Asks quality questions
DNA analysis	Uses technology
Weapon impression analysis	Uses safety techniques
	Recognizes the importance of explaining data with precision and accuracy

Published Materials	Instructional Supplies
Forensic Science	1) Composition Notebook 2) Pencil or pen 3) Calculator

INSTRUCTIONAL MATERIALS AND SUPPLIES

EVALUATION AND GRADING

Assignments	Grade Weights	Grading Scale
Classwork & Homework Laboratory Activities Unit Tests Culminating Projects Final Exam	ClassAssessments/Homework/ Quizzes 15% Lab 15% Projects 15% Summative Assessment 40% Final Exam 15%	A: 90 and above B: 80 – 89 C: 70 – 79 F: 69 or below

OTHER INFORMATION

Expectations for Academic Success	Other activities to improve grade
1) Read daily 2) Ask questions 3) Participate constructively as a team member 4) Proof read written assignments and edit meaningfully 5) Review multiple sources of information 6) Challenge yourself to continuously improve	• Before school help available • Individual projects • Recovery

The syllabus may be updated as needed throughout the semester.