**Course Syllabus**

**Forensics & Criminal Investigations, Fall 2024**

**Instructor: Katie Weir**

**Dear Parent/Guardian,**

I look forward to having a great year! I feel fortunate to have your student in my class this semester. I hope that you will contact me if you have any concerns about the progress of your student, or any aspect of the instruction.

Along with your student please read the syllabus and lab safety contract linked in Schoology or via the QR code on this page. Then complete this signed classroom/lab contract paper form. Please provide a current email address and phone number at which I can contact you should the need arise.

Thank you,

Mrs. Katie Weir

kmweir2@madisoncity.k12.al.us

**Syllabus QR Code Safety Contract QR Code**



**My student and I have read and discussed the classroom syllabus. Please complete the form below.**

By signing this you also give permission for your student to participate in all classroom activities including fingerprinting, discussion and video of sensitive/graphic subject matters as it pertains to the course content.

Student Name (Print) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_

Student Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_

Parent/Guardian Name (Print) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_

Parent/Guardian Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_

Parent/Guardian Email Address(es)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Best Phone number \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Anything you would like me to know about your student:

**Course Description:**

This challenging class is designed to explore the science of crime scene analysis with real

life application of Biology, Chemistry, and Physics. A focus on solving high-level problems, crime scene management, fingerprint collection and analysis, forensic anthropology, forensic odontology, forensic pathology, and blood spatter analysis.

**Course Objectives/Students will:**

| 1 | Explain career opportunities in forensic and criminal investigations. |
| --- | --- |
| 2 | Identify safety precautions for forensic and criminal investigators. |
| 3 | Describe the history of forensic science. |
| 4 | Explain criminal investigation procedures, including purpose and types. |
| 5 | Describe responsibilities of various personnel involved in crime scene investigations. Examples: police, detectives, laboratory specialists, medical examiners |
| 5.1 | Explaining techniques for searching, sketching, and recording data from a crime scene |
| 6 | Explain ways to collect and preserve evidence from a crime scene. |
| 6.1 | Distinguishing between physical evidence and witness evidence |
| 6.2 | Comparing the three main pattern types that combine to form an individual's unique fingerprint |
| 6.3 | Explaining different methods of latent fingerprint development |
| 6.4 | Identifying origins of impressions, including footwear and tire tread |
| 6.5 | Describing ways to identify hair, fiber, and blood evidence |
| 7 | Describe presumptive and confirmatory forensic tests. Examples: blood type comparison, DNA testing |
| 8 | Describe the importance of genetic information to forensics. |
| 8.1 | Using the process of gel electrophoresis for deoxyribonucleic acid (DNA) fingerprinting |
| 9 | Describe the decomposition process. |
| 9.1 | Using rigor mortis to determine corpse position |
| 9.2 | Describing decomposition by-products used to determine time of death |
| 9.3 | Using entomological life cycles to determine time of death |
| 10 | Identify the importance of skeletal remains in forensics. |
| 10.1 | Comparing bones and skulls based on age, sex, and race |
| 10.2 | Using forensic dentistry to establish identity |
| 11 | Describe general categories of drugs and poisons, including their effects on humans. |
| 11.1 | Explaining ways poisons are detected during autopsy |
| 12 | Explain fingerprinting methods and identification techniques. |
| 13 | Distinguish between class and individual characteristics of firearms. |
| 14 | Use laws of physics to explain forensic evidence. |
| 14.1 | Analyzing blood splatter patterns to determine speed, height, and direction |
| 14.2 | Tracking trajectories of collected evidence |
| 15 | Describe techniques used to determine the validity of forensic documents. Examples: fiber and handwriting analysis, ink chromatography |
| 16 | Describe arson and explosives and the forensic investigations. |

**Classroom Rules and Expectations:**

1. **BE ON TIME**. Tardy means that you are not **in the room** and getting seated when the bell rings. If you are not in the room when the tardy bell rings, you will need to go to the attendance office for a tardy slip. *JCHS policy governs the consequences for tardiness*.

2. **BE RESPECTFUL**: Practice courtesy and mutual respect. Treat others as you would like to be treated. The classroom and laboratory is to be regarded as a safe and supportive learning environment.

3. **BE YOUR OWN PERSON:** Many assignments are to be completed by lab partners or within a group. However, **ALL students are expected to contribute and/or work is to be done individually**. Plagiarizing/copying assignments from lab partners is not acceptable and can result in a zero on the assignment. Turnitin will be used on assignments.

4. **BE PREPARED:** Come prepared for class both mentally and with proper materials.

5. **BE WHERE YOUR FEET ARE:** Anything distracting to you, your classmates, or your teacher should be put away during class (phone, food, candy, drinks, etc**.)**

**Cell Phones:** Cell phones and earbuds/headphones will not be allowed to be used during classroom instruction time. Phones and earbuds/headphones will be put away in a location designated by the teacher and placed in silent mode. In secondary schools, students will have access to their phones and earbuds/headphones outside of classroom instruction time such as between classes and lunch. Failure to follow these procedures will result in a disciplinary referral to the office.

**Classroom Management Plan**

1. Verbal reprimand
2. Conference with student with parent contact
3. Withdrawal of privilege(s) with parent contact
4. Other consequences determined to be reasonable and appropriate by the school administration.

**AI Policy:** The use of Artificial Intelligence (AI) tools to complete assignments without prior disclosure and approval is strictly prohibited. Any undisclosed use of AI tools will be considered academic dishonesty and will result in an automatic grade of zero for the assignment in question.

All assignments are subject to verbal review.

**Accommodations:** Requests for accommodations for this course or any school event are welcomed from students and parents.

**Concerning Laptop Utilization:**

1. Student laptops should not be hard-wired to the network or have print capabilities.

2. Use of discs, flash drives, jump drives, or other USB devices will not be allowed on Madison City computers.

3. Neither the teacher, nor the school is responsible for broken, stolen, or lost laptops.

4. Laptops and other electronic devices will be used at the individual discretion of the teacher.

Students will use their school issued chromebook for class assignments; including, but not limited to: lab reports, comprehension checks, quizzes and tests. If your school issued device is not working properly, I can assist you in filling out an IT ticket.

**Turnitin Notice:** The majority of writing assignments in this course will be submitted to Turnitin

via the Schoology learning platform. The primary focus of this software is to help students become better writers and scholars. Turnitin generates a report on the originality of student writing by comparing it with a database of periodicals, books, online content, student papers, and other published work. This program will help students discern when they are using sources fairly, citing properly, and paraphrasing effectively - skills essential to all academic work.

Students will have the opportunity to review their Turnitin originality report and will

have the opportunity to make revisions before submitting their work for grading. Once their work is submitted, teachers have the opportunity to view the student's originality report and grade accordingly.

**Grading Policy:**

Test/project grades will account for 70% of the 9-weeks grade, with the remaining 30%

being determined by quiz/daily grades. Some quizzes will count as test grades. The grading scale is as follows: A (90-100%), B (80-89), C (70-79), D (65-69), and F (below 65). Grades will be a reflection of mastery of the standards. Make sure all absences are excused as class work can be made up and graded for excused absences only. The final exam counts for 20% of the final grade. There will be several projects assigned. Students should be prepared to work in the home with one to several students. All safety rules learned in class should be applied at home. Be aware that some of the materials students use at home may damage household contents. Students should be thoughtful of their working environment.

**Make-Up Work Policy:**

Attendance is crucial for success in Forensics as most of the work will be done in class

and many of the activities are difficult to make up.

It is the student’s responsibility to collect assignments that are missed during an absence

from Schoology, another student, or by contacting the teacher. Students have the same number of days they were absent to make up an assignment/activity. Note: Certain lab activities cannot be made up due to logistical issues, and students will be given a written assignment to replace the lab grade.

Tests & quizzes that are missed will be completed outside of instructional/activity time.

Please talk to me to set up a time to make up your assignment during Refuel. It is the student’s responsibility to set up a time and make up your test or quiz.

Late work will be accepted with the penalty of 20% deducted per day late for the

maximum of 5 school days, but students must discuss turning in late work. **Late work will not be accepted after 1 week after the due date.**

Please monitor Schoology and the classroom board for deadlines. Enable notifications on

Schoology to get reminders!

**Unexcused Absences**

It is very important that you get all absences excused. If you do not, the computer will not

allow me to enter a grade above a zero for any given assignment on the day you missed. It is **your** responsibility to take care of this and to let me know when the excuse has been updated. I do not receive notifications that absences have been excused.

**Embedded Numeracy and Literacy**

Opportunities for numeracy and literacy in the CTE class are critical and help support the goals of CTE in preparing students for college and/or career. Example anchor activities for mathematics include performing various calculations such as femur length to determine height, as well as calculation of blood splatter angle of impact; analyzing data collected from laboratory application and research. Example anchor activities for literacy include: Reading scientific articles, interviewing various medical professionals, investigating various STEM fields and describing their responsibilities and the requirements to enter the field, writing a crime scene investigation report or other science laboratory report.

**Technical Writing**

Students will learn to select and use appropriate language and layout for technical documents and write documents that are clear, accurate, and grammatically correct.

**CTSO:**  Students are encouraged to participate in HOSA. Competitive events that relate to a specific topic discussed in class will be highlighted.

**Course Materials:**

*Per Individual:*

Binder or folder Black/Blue ink pens & Pencils

Loose leaf paper Death’s Acre book, by Dr. Bill Bass

Roll of paper towels $15 lab fee (paid at schedule pick-up)

For the classroom: Roll of paper towels or pack of sanitizing wipes, 1 pack of copy paper

*Classroom Wishlist Items (but not required):*

Hand sanitizer Sanitizing spray Tissues Handsoap

**Texts/Required Readings:**

*Forensic Science: An Introduction THIRD EDITION by Richard Saferstein.* This will be provided in class as needed.

*Death’s Acre: Inside the Body Farm By Dr. Bill Bass & Jon Jefferson-* you will need to purchase this book as soon as possible to start your book project. You can purchase from Amazon, Books A Million, a former Forensics student, etc., new or used. Huntsville-Madison County Library also has copies available to be checked out.

**Course Syllabus**

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| **18 - WEEK PLAN\*** | |
| --- | --- |
| **WEEK 1** | Lab Safety and Unit 1: Intro to Forensics |
| **WEEK 2** | Unit 1: Intro to Forensics |
| **WEEK 3** | Unit 2: Anthropology |
| **WEEK 4** | Unit 3: Autopsies, Decomposition, & Entomology |
| **WEEK 5** | Unit 3: Autopsies, Decomposition, & Entomology |
| **WEEK 6** | Unit 4: Fingerprints |
| **WEEK 7** | Unit 4: Fingerprints |
| **WEEK 8** | Unit 5: Arson and Explosives |
| **WEEK 9** | Unit 6: Impressions |
| **WEEK 10** | Unit 6: Impressions |
| **WEEK 11** | Unit 7: Trace Evidence |
| **WEEK 12** | Unit 8: DNA Evidence |
| **WEEK 13** | Unit 9: Blood |
| **WEEK 14** | Unit 10: Toxicology |
| **WEEK 15** | Unit 11: Document Analysis |
| **WEEK 16** | Unit 11: Document Analysis/Final Crime Scene |
| **WEEK 17** | Final Crime Scene |
| **WEEK 18** | Finals |

**\* This syllabus serves as a guide for both the teacher and student; however, during the term it may become necessary to make additions, deletions or substitutions.**

\*\***Students will be exposed to pictures, videos, readings, and discussions related to crime scene investigations that could be considered graphic or disturbing. Students will never be forced to interact with material they find uncomfortable, however, alternative assignments will not always be available. Students are expected to behave in a mature manner and discuss any issues with the material with the teacher.**

**Parent/Guardian & Student Notifications**

Students should check our Schoology classroom as soon as possible. Notes, videos, homework, extra credit, reminders, possible assignments and quizzes/tests will be uploaded often. To join the Schoology classroom as a student, you should have been automatically added, but let me know if you were not. If a parent/guardian would like a parent/guardian access code, please contact me.

**Contact/Science Help:**

I will be available to students during Refuel on most days. I encourage both the students and parents to let me know if there is anything I can do to help with student success. Email is the best way to reach me during the year and check my email several times per day. The only bad question is the one that is not asked. Please use me as a resource because I am here to help you! I look forward to helping each of you achieve success this year!