# SURVEY OF FORENSIC **SCIENCE**

CRIJ 3301 Fall 2022 Course Syllabus



# **Course Description**

Forensic science is a broad term that encompasses any scientific inquiry that is applied to the legal system. This course is designed to familiarize the student with the most common forensic disciplines including, but not limited to, criminalists, forensic biology, forensic chemistry, and death investigation. Students will learn about the types of evidence each discipline is responsible for as well as common methods of evidence analysis and interpretation. This course will also discuss current research in forensic science as well as the challenges that modern forensic investigators face in the crime scene, laboratory, and courtroom settings.

### DR. DANIELLE BAILEY

My office is in the College of Arts & Sciences building, Office 134. You can reach me at dbailey@uttyler.edu or 903.566.7432. My personal Zoom Meeting room ID is my office phone number.

I hold Open Office Hours on Tues/Thurs from 12:30PM to 2:00PM. During these times, I will be available in my office and my personal Zoom meeting room. Sign-ups for office hour appointments are available on Canvas, and drop-ins are also welcome.

take place through Canvas.

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This syllabus was created to provide you with an overview of the learning expectations for this course. You can find additional details about class assignments and course policies on Canvas.



# Course Learning Objectives

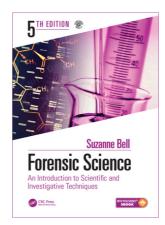
By the completion of this course, you will be able to:

- Distinguish the different forensic disciplines and the legal system within forensic science
- Compare/contrast the types of evidence each forensic discipline examines
- Discuss the historical and print development of forensic science
- Explain how forensic scientists identify, collect, and analyze forensic evidence
- Describe common forensic analysis methodologies
- Identify the appropriate type of evidence for different forensic analyses
- · Apply the scientific method to forensic evidence
- Critique how modern technology enhances and limits forensic analysis
- Analyze the influence of DNA evidence has had on forensic analyses from different fields
- Identify ethical considerations for forensic scientists
- Identify the roles of coroner, medical examiner, and forensic anthropologist within forensic science.

# **Course Format**

This course is taught entirely online. All course interactions will take place through Canvas, UT Tyler's learning management system. Video lectures are provided for each module, and there are a variety of other online technologies used to facilitate class assignments. In order to be successful, you will need to complete all online components of the course. To help you stay organized, a course schedule is provided for you in Canvas.

# Required Textbook



Forensic Science: An Introduction to Scientific and Investigative Techniques, 5th edition

S. Bell

ISBN: 9781138048126 (Hardback) ISBN: 9781315170336 (E-book)

There are earlier editions of this textbook, but this edition is substantially different than prior editions. Please make sure you have ordered the <u>5th edition</u>.

# Supplementary Materials

Additional instructional materials are provided for you in the Canvas course and on Dr. Bailey's website (link below). Use of these materials are not required but are recommended for students seeking additional instruction or assistance with the course material.



# **Course Assignments**

# Reading Quizzes

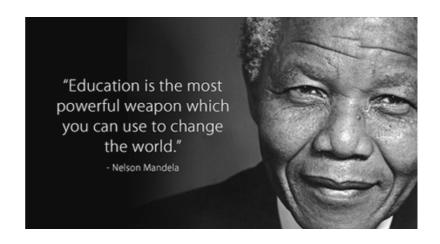
To promote retention and comprehension of the assigned reading material, you will complete a short reading quiz each week. Quizzes will consist of multiple choice and true/false questions only. You may take each quiz up to three times. Only the highest score will count towards your final grade.

## Lecture Video Quizzes

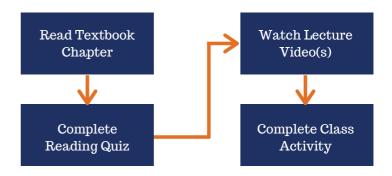
All lecture material will be provided in mini-lectures focusing on different disciplines within the field of forensic science. Lecture videos include multiple choice and true/false quiz questions embedded directly into the video. Quizzes are automatically scored and entered into your Canvas gradebook. You may retake the video again for a higher score.

## **Class Activities**

Class activities are designed to help supplement the reading and lecture material for that module. A diverse range of activities (writing, hands-on, research, etc.) will be included to appeal to different learning styles and encourage student engagement. Most class activities will be graded using a standardized rubric. Submissions will be graded based on the overall professionalism of the submission and the content of the activity itself.



## Typical Module Structure



## **Discussion Boards**

There is one group project in this course, described on the next page. Sine this course is done asynchronously, meaning on your own time, you will use discussion boards and Canvas groups to collaborate with your group members throughout the group project.



# Forensic Misconduct Website

Jurors are usually very trustful of forensic experts, and it is therefore of very important that forensic analysts hold themselves to the highest ethical standard. Unfortunately, there are always a few bad apples, people who are willing to lie, cheat, or plant evidence to get the findings they want. Given their access to multiple cases at a time, one instance of misconduct can cause a ripple effect in the criminal justice system, leading to reopened cases, overturned convictions, and public mistrust of the entire forensic science field.

This activity will be completed in small groups. You will be assigned to a group by Dr. Bailey. Your group will create a website that documents high-profile cases of misconduct by forensic investigators. The website will be developed on Google Sites, a user-friendly, collaborative website building program.

## **Misconduct Cases**

Each website will feature case summaries of 3 - 4 of the following people:

- Fred Zain, forensic chemist
- David Kofoed, crime scene investigator
- · Annie Dookhan, forensic chemist
- Gary Veeder, fiber analyst
- Sandra Marie Anderson, cadaver dog handler
- · Joyce Gilchrist, forensic chemist
- David Harding, state trooper
- Nika Larsen, forensic chemist
- James Woodson, forensic evidence specialist
- Justin McGee, crime scene investigator
- Jonathan Salvador, forensic chemist
- Sonja Farak, forensic chemist

### **Group Member Responsibilities**

I expect you to adhere to the following conditions during group activities:

- 1. Notify me and your group members as early as possible if you are unable or unwilling to participate in any part of the group activity.
- 2. Participate in your group to the best of your ability. You should expect to meet outside of class time (in person or virtually) to complete group assignments.
- 3. Split group work evenly between all group members so that all group members contribute equally to the final product.
- 4. Provide all requested contributions to your group before the assignment due date so that the group activity can be compiled, edited, and finalized together.
- 5. Do not wait until the deadline to bring concerns to your group members and/or the professor.
- 6. Bring your best self to your group.

Group activities include both individual and group grade components. Based on the evaluation survey and unsolicited feedback, I reserve the right to adjust the group grade for any individual group member.



# Class Assignments

Welcome Module Scavenger Hunt

Introduction Video

Plagiarism Certificate

Reading Quizzes (10)

Lecture Video Quizzes (40)

Class Activities (5)

20 points
100 points
200 points
50 points

**Class Assignment Points:** 

400

# Forensic Misconduct Website

Website Planning Discussion Board 10 points
Case Summary Rough Draft 20 points
Case Summary Peer Review 40 points
Website Rough Draft Discussion Board 30 points
Final Website 90 points
Group Evaluation Survey 10 points

**Misconduct Website Points:** 

200

**Total Points Possible** 

600

# Grading Scale

- A 540 or more points
- **B** 480 539 points
- **C** 420 479 points
- **D** 360 419 points
- F Less than 360 points



# **Assignment Submissions**

All assignments will be submitted on Canvas. Due dates for all assignments are provided in the detailed Course Schedule, available in the Welcome Module of the Canvas course. I encourage you to use the Canvas Calendar to keep track of the course assignments and upcoming deadlines.

# My Response Time

I try to respond to all emails and voicemails within one business day. I do not regularly check emails on weekends, holidays, and school breaks, so response time may be longer at these times. I try to grade all assignments, activities, and exams within two weeks of the due date. Much of the time you will be able to see grades sooner that the times listed. However, there are times when it takes longer to grade assignments, so please be patient if you do not see your grades immediately.

# **Open Office Hours**

I hold open office hours each week. During these times, I can go over assignments, discuss quizzes/exams, and answer any questions about course material. When I am holding Online Open Office Hours, I will be available in my campus office (CAS 134) as well as my personal Zoom room unless I have informed you otherwise. If you are unable to visit me during my scheduled office hours and need help, please feel free to contact me via email and set up an appointment. I can set up oncampus or video-conferencing appointments as necessary.

# Late Assignments

I do not accept late assignments in this course. However, I recognize that life sometimes interferes in your plans, so there are multiple assignments that can be dropped without penalty. Canvas will automatically drop one lecture video quiz score and two reading quiz grades. You are also only required to submit five class activities out of the twelve activities offered throughout the semester.

If life circumstances arise that will cause substantial disruption to your workload, please reach out to me to discuss possible alternatives.

"Nothing ever comes to one, that is worth having, except as a result of hard work."

- Booker T Washington

# I'm Here to Help You Succeed



During the course, if you experience any situation that impacts your physical, mental, or emotional health, please reach out to me by email. My goal is to help you be successful in the course, so I am happy to discuss alternative options if it becomes necessary.



### Introduction to Forensic Science

- Reading Quizzes
- Lecture Video Quizzes
- Class Activity



#### **Bloodstain Patterns**

- Reading Quiz
- Lecture Video Quizzes
- Class Activity



#### Forensic Anthropology

- Reading Quiz
- Lecture Video Quizzes
- Class Activity



#### Introduction to the Course

- Welcome Module Scavenger Hunt
- Lecture Video Quiz



- Class Activity



#### Forensic Chemistry

- Reading Quizzes
- Lecture Video Quizzes
- Class Activity



#### Crime Scene Investigation

- Reading Quiz
- Lecture Video Quizzes
- Class Activity
- Plagiarism Certificate



### **Fingerprints**

- Reading Quiz
- Lecture Video Quizzes
- Class Activity
- Case Summary Peer Review



Firearms, Toolmarks, and Impression Evidence • Reading Quizzes

Arson & Fire Investigation

Forensic Biology Reading Quizzes • Lecture Video Quizzes

Class Activity

• Reading Quiz • Lecture Video Quizzes • Case Summary Rough Draft

### Medicolegal Investigation of Death

- Reading Quiz
- Lecture Video Quizzes
- Website Planning Discussion Board



#### Trace Evidence

- Reading Quiz
- Lecture Video Quizzes



• Lecture Video Quizzes

• Case Summary Peer Review

Class Activity

### Forensic Entomology

- Reading Quiz
- Lecture Video Quizzes
- Class Activity

- Class Activity



### Forensic Misconduct Website

• Website Rough Draft Discussion Board

#### Finals Week

- Forensic Misconduct Website
- Group Member Evaluation Survey



## College of Arts & Sciences Advising

College of Arts & Sciences (CAS) 215 903.565.7389 advising@uttyler.edu

### **Bookstore**

University Center (UC) 903.566.7070 bookstore@uttyler.edu

# Campus Computing & Technology Support

Ratcliff Building North (RBN) 3022 903.565.5555 itsupport@uttyler.edu

## **Muntz Library**

Robert R. Muntz Library (LIB) 903.566.7343 library@uttyler.edu

## Military & Veterans Success Center

University Center (UC) 3440 903.565.5972 mvsc@uttyler.edu

## Patriot Pantry

Muntz Library (LIB) 223 patriotspantry@uttyler.edu

## **Student Accessibility Office**

University Center (UC) 3150 903.565.7079 saroffice@uttyler.edu

## **Student Counseling Center**

903.565.5746 (online appointments available) counselingandwellness@uttyler.edu

## University Health Clinic

University Health Clinic (UHC) 903.939.7870 wellness@uttyler.edu

## **UT Tyler Police Department**

University Service Center (USC) 125 903.566.7300 police@uttyler.edu

## Writing Center

College of Arts and Sciences (CAS) 212 uttyler.mywconline.com (online scheduling) writingcenter@uttyler.edu

## One Stop Service Center

Stewart Hall (STE) 230 903.566.7180 enroll@uttyler.edu or cashiers@uttyler.edu One Stop Service Center includes:

- Cashier's Office
- Enrollment Services
- Financial Aid
- Student Business
   Services

Crisis Help Line Available 24/7 903.566.7254





# **UT Tyler Policies**

#### **UT Tyler Honor Code**

Every member of the UT Tyler community joins together to embrace: Honor and integrity that will not allow me to lie, cheat, or steal, nor to accept the actions of those who do.

#### **Students Rights and Responsibilities**

To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link: ww.uttyler.edu/wellness/rightsresponsibilities.php

#### Campus Carry

We respect the right and privacy of students 21 and over who are duly licensed to carry concealed weapons in this class. License holders are expected to behave responsibly and keep a handaun secure and concealed. More information is available at http://www.uttyler.edu/about/campus-carry/index.php.

#### **UT Tyler a Tobacco-Free University**

All forms of tobacco will not be permitted on the UT Tyler main campus, branch campuses, and any property owned by UT Tyler. This applies to all members of the University community, including students, faculty, staff, University affiliates, contractors, and visitors. Forms of tobacco not permitted include cigarettes, cigars, pipes, water pipes (hookah), bidis, kreteks, electronic cigarettes, smokeless tobacco, snuff, chewing tobacco, and all other tobacco products.

There are several cessation programs available to students looking to quit smoking, including counseling, auitlines, and group support. For more information on cessation programs please visit www.uttyler.edu/tobacco-free.

#### **Grade Replacement / Forgiveness and Census Date Policies**

Students repeating a course for grade forgiveness (grade replacement) must file a Grade Replacement Contract with the Enrollment Services Center (ADM 230) on or before the Census Date of the semester in which the course will be repeated. Grade Replacement Contracts are available in the Enrollment Services Center or

at http://www.uttyler.edu/registrar. Each semester's Census Date can be found on the Contract itself, on the Academic Calendar, or in the information pamphlets published each semester by the Office of the Registrar.

Failure to file a Grade Replacement Contract will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates are eligible to exercise grade replacement for only three course repeats during their career at UT Tyler; graduates are eligible for two grade replacements. Full policy details are printed on each Grade Replacement Contract.

The Census Date is the deadline for many forms and enrollment actions of which students need to be aware. These include:

- 1. Submitting Grade Replacement Contracts, Transient Forms, requests to withhold directory information, approvals for taking courses as Audit, Pass/Fail or Credit/No Credit.
- 2.Receiving 100% refunds for partial withdrawals. (There is no refund for these after the Census Date)
- 3. Schedule adjustments (section changes, adding a new class, dropping without a "W grade)
- 4. Being reinstated or re-enrolled in classes after being dropped for non-payment
- 5. Completing the process for tuition exemptions or waivers through Financial Aid

#### **State-Mandated Course Drop Policy**

Texas law prohibits a student who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. This includes courses dropped at another 2-year or 4-year Texas public college or university. For purposes of this rule, a dropped course is any course that is dropped after the census date (See Academic Calendar for the specific date).

Exceptions to the 6-drop rule may be found in the catalog. Petitions for exemptions must be submitted to the Enrollment Services Center and must be accompanied by documentation of the extenuating circumstance. Please contact the Enrollment Services Center if you have

#### Disability/Accessibility Services

In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA) the University of Texas at Tyler offers accommodations to students with learning, physical and/or psychological disabilities. If you have a disability, including a non-visible diagnosis such as a learning disorder, chronic illness, TBI, PTSD, ADHD, or you have a history of modifications or accommodations in a previous educational environment, you are encouraged to visit

https://hood.accessiblelearning.com/UTTyler and fill out the New Student application. The Student Accessibility and Resources (SAR) office will contact you when your application has been submitted and an appointment with Cynthia Lowery, Assistant Director of Student Services/ADA Coordinator. For more information, including filling out an application for services, please visit the SAR webpage at http://www.uttyler.edu/disabilityservices, the SAR office located in the University Center, # 3150 or call 903.566.7079.

- taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts.
  "Cheating" includes, but is not limited to:

  copying from another student's test paper;

  using, during a test, materials not authorized by the person giving the test;

  failure to comply with instructions given by the person administering the test;

  possession during a test of materials which are not authorized by the person giving the test, such as class notes or specifically designed "crib notes". The presence of textbooks constitutes a violation if they have been specifically prohibited by the person administering the test:
- administering the test;
  using, buying, stealing, transporting, or soliciting in whole or part the contents of an
  unadministered test, test key, homework solution, or computer program;
  collaborating with or seeking aid from another student during a test or other assignment

- examination; divulging the contents of an examination, for the purpose of preserving questions for use by another, when the instructors has designated that the examination is not to be removed from the examination room or not to be returned or to be kept by the student; substituting for another person, or permitting another person to substitute for oneself to take a course, a test, or any course-related assignment; paying or offering money or other valuable thing to, or coercing another person to obtain an unadministered test, test key, homework solution, or computer program or information about an unadministered test, test key, home solution or computer program; falsifying research data, laboratory reports, and/or other academic work offered for credit; taking, keeping, misplacing, or damaging the property of The University of Texas at Tyler, or of another, if the student knows or reasonably should know that an unfair academic advantage would be gained by such conduct; and misrepresenting facts, including providing false grades or resumes, for the purpose of obtaining an academic or financial benefit or injuring another student academically or financially.

financially. lagiarism" includes, but is not limited to, the appropriation, buying, receiving as a gift, or sining by any means another's work and the submission of it as one's own academic work

in preparing academic assignments offered for credit or collaboration with another person to commit a violation of any section of the rules on scholastic dishonesty.
iv. All written work that is submitted will be subject to review by plagiarism software.