
Physical Aspects of Forensic Science



TEXAS A&M
UNIVERSITY
CENTRAL TEXAS

Instructor: Associate Professor Tammy Bracewell, PhD
Class Location: HH 318
Class Duration: August 23-December 10, 2021, MW 9:30am-10:45am
Office Hours: By appointment, online WebEx
Email:

- tammy.bracewell@tamuct.edu or Canvas inbox *** preferred***
- When messaging/emailing, always identify yourself and what course you are in. In general, when communicating electronically you should use complete sentences and be very clear about what you are asking or saying to avoid miscommunication.

*****Note: This syllabus is subject to revisions when necessary throughout the semester. Students will be notified of any changes via Canvas and/or in class*****

MODE OF INSTRUCTION AND COURSE ACCESS

This is a *web enhanced* course which meets approximately 51% face-to-face and 49% online. Meeting days are listed in the course calendar below. For online work, this course uses the A&M-Central Texas Canvas Learning Management System [<https://tamuct.instructure.com/>]. You must check Canvas announcements every day to keep updated on potential changes to class meeting dates due to weather.

Technology Requirements

This course will use the A&M-Central Texas Instructure Canvas learning management system. Logon to A&M-Central Texas Canvas [<https://tamuct.instructure.com/>] or access Canvas through the TAMUCT Online link in myCT [<https://tamuct.onecampus.com/>]. You will log in through our Microsoft portal.

Username: Your MyCT email address. Password: Your MyCT password

Canvas Support

Use the Canvas Help link, located at the bottom of the left-hand menu, for issues with Canvas. You can select "Chat with Canvas Support," submit a support request through "Report a Problem," or call the Canvas support line: 1-844-757-0953.

For issues related to course content and requirements, contact your instructor.

Other Technology Support

For log-in problems, students should contact Help Desk Central 24 hours a day, 7 days a week

Email: helpdesk@tamu.edu

Phone: (254) 519-5466

[Web Chat](http://hdc.tamu.edu): [http://hdc.tamu.edu]

Please let the support technician know you are an A&M-Central Texas student.

STUDENT-INSTRUCTOR INTERACTION

Because this is a web-enhanced course, our communication will be both in person and via Canvas. All students are able to schedule a telephone conference or a Web-Ex meeting.

I will check and reply to student emails on a daily basis – students should expect a response within 24 hours Monday-Friday. Any deviations from this will be announced on Canvas. Checking Canvas frequently is important as this is where any class announcements will be posted. Messages sent over the weekend can expect a response the following Monday.

It is HIGHLY recommended that you go into your “settings” in Canvas, select “notifications”, and elect to receive emails when announcements are made. You are responsible for obtaining information in a timely manner.

My preferred method of electronic student interaction is via Canvas. All students should identify the class they are in, use proper salutations and signatures, identify a question, be succinct, and maintain professionalism in any correspondence.

COURSE INFORMATION

1.0 Catalogue Description

Physical Aspects of Forensic Science. (3-0) This course provides the non-science student a basic understanding of the specialty field of forensic science. The course focuses on the physical (non-biological) aspects of forensic science.

2.0 Student Learning Outcomes

By the end of this course you should be able to demonstrate an understanding of physical aspects of forensic science.

1. Understand basic crime scene procedures.
2. Understand the role of forensic scientists and crime scene investigators.
3. Understand the different applications of forensic science.
4. Demonstrate a rudimentary understanding of processing physical evidence.
5. Demonstrate the ability to process a crime scene.

3.0 Required Textbooks

Houck & Siegel (2015). Fundamentals of Forensic Science (3rd ed). Elsevier: Oxford.

Note: This is the same book I use in the Spring biological aspects course. If you plan on taking that course I recommend keeping your book.

4.0 Supplementary Materials

Supplementary material may take the form of handouts, oral presentations, and references from your instructor, presentations by students, and articles we read. Supplementary materials are handed out in class or posted to Canvas.

5.0 Materials Needed:

- Disposable/reusable LAB COAT. These will be on sale in our bookstore for approximately 10 dollars but are also available online.
 - A lab coat is required when in the lab.
 - It must be disposable/reusable, not cloth.
 - We will be storing these safely in the lab for lab use only.
 - It must be able to close in the front.

REQUIRED COURSE WORK

I. Lab Safety (15 points)

Students must complete the “Lab Safety Module” on Canvas, including the Lab Safety Quiz. Safety equipment locations will be demonstrated in class. After taking the module, students must turn in a hard copy of the Safety Agreement no later than the second day of class. Failure to complete the module or turn in the safety agreement will result in the student not being able to enter the lab.

II. Assignments 8 x 20 (160 points)

There will be 8 assignments throughout the semester. These assignments will range from in the lab to outdoors to at home assignments. Please take note of all due dates as there are no make ups.

III. Labs 9 x 25 (225 pts)

There will be 9 labs this semester, 25 points each. You must be in class to complete and obtain credit. These are participation based labs, meaning that you are learning as you go. You must complete all parts of each lab to earn credit. Please remember that while these are participation based, complete answers and college level work is expected.

IV. Exams 3 x 100 (300 points)

All exams will be held online.

OTHER INFORMATION REGARDING THE COURSE

I. Late assignments: Late assignments will generally not be accepted. In the event a student misses a class for a legitimate reason (work or medical) advanced notice is required to make up any work. Documentation (including date and time) will be required for any make up assignments. There are very few reasons that late notice may be acceptable.

Notice must be in the form of a Canvas message. We can talk about it in class but you must send me a message so that we can communicate through that channel.

Any online assignments will not have make-ups. If you miss a deadline due to a legitimate reason please contact me.

COVID: If you are under recommendation to self-isolate or quarantine please contact me as soon as possible. In addition to the University reporting you are responsible for contacting your instructors and making arrangements.

II. Supplementary Material: Additional information may be given that supplement the topics to be addressed. This supplementary material is designed to broaden the educational experience and create more variety to the usual lecture/discussion format of class presentations. You are responsible for all information in the supplementary material.

III. Extra Credit: Extra credit is not available in this class.

IV. Punctuality: Please be ON TIME to this class. Excessive tardiness is a distraction to the entire class and will not be tolerated. Occasionally things may come up and you may run late. In this instance please enter as quietly as possible and take the first available seat. If tardiness becomes a reoccurring problem a policy of no admittance after a certain time frame will be implemented.

V. Civility: While this is a forensics class it is inevitable that some sensitive topics (race, religion, etc...) will be discussed. All students are expected to treat each other with respect. You may disagree but you must do so with civility. Rude and degrading behavior will not be tolerated.

VI. Posting of Grades: All student grades will be posted in the Canvas grade book and students should monitor their grading status through this tool.

VII. Miscellaneous: You are not permitted to record this course. This includes taking photos of powerpoints. If you have an accommodation allowing recording please let me know.

VIII. Grading Criteria Rubric and Conversion:

Final course grades will be assessed on the following scale:

Assignment	Points
Exam 1	100 points
Exam 2	100 points
Exam 3	100 points
Lab safety	15 points
Assignments	160 points
Labs	225 points
Total	700
627-700 points	A
557-626 points	B
487-556 points	C
417-486 points	D
<417 points	F

*****Grade Posting*** Most grades should be posted on Canvas within one week of the due date. Any deviations from this will be communicated to the class.**

At the end of the semester there will be NO curve and no extra points given. It is up to YOU to ensure you have the grade you want.

Course Calendar

Week	Topics/Reading	Assignments
8/23	Chapter 1 & Syllabus	
8/25	Chapter 1-Introduction	Safety agreement
8/30	Chapter 2-Crime Scene Investigation**	Assignment 1-crime scene mapping
9/1	Chapter 2-Crime scene Investigation ♦ ♦	
9/6	Chapter 3-Nature of Evidence **	Assignment 2- Evidence Type
9/8	Chapter 3-locards exchange	Lab 1
9/13	Chapter 19- Friction Ridge Examination	Assignment 3
9/15	Chapter 19- Friction Ridge Examination	Lab 2
9/20	outdoor activity/Lab ♦ ♦	Lab 3
9/22	outdoor activity/Lab ♦ ♦	Lab 4
9/27	Processing evidence-lab	Labs 3-4
9/29	Review**	

10/4	Exam-online** Available from 10/3-10/5	
10/6	Chapter 17-Soils & Glass**	
10/11	Chapter 18- Fires and Explosions**	
10/13	Chapter 18	Lab 5
10/18	Chapter 20-Questioned Docs	Assignment 4
10/20	Chapter 20-Questioned Docs	Lab 6
10/25	Chapter 21-Firearms and Tool Marks	Assignment 5
10/27	Chapter 21-Firearms and Tool Marks	Lab 7
11/1	Exam –Online** Available from 10/31-11/2	
11/3	Chapter 15-Textile Fibers**	
11/8	Chapter 15-Textile Fibers	Lab 8
11/10	Chapter 22-Impression Evidence	
11/15	Chapter 22-Impression Evidence ♦♦	Lab 9
11/17	Chapter 16-Paint Analysis**	
11/22	Chapter 16-Paint Analysis**	Assignment 6
11/24	Chapter 25-Ethical Issues**	Assignment 7
11/29	Chapter 24-Legal Issues**	Assignment 8
12/1	Review**	
12/6 12/8	Final Exam Open** Available from 12/6-12/8	

♦♦ Meeting Outside
** Online

WARRIOR SHIELD

Emergency Warning System for Texas A&M University-Central Texas

Warrior Shield is an emergency notification service that gives Texas A&M University-Central Texas the ability to communicate health and safety emergency information quickly via email, text message, and social media. All students are automatically enrolled in Warrior Shield through their myCT email account.

Connect to Warrior Shield by [911Cellular](https://www.tamuct.edu/police/911cellular.html) [https://www.tamuct.edu/police/911cellular.html] to change where you receive your alerts or to opt out. By staying enrolled in Warrior Shield, university officials can quickly pass on safety-related information, regardless of your location.

UNIVERSITY RESOURCES, PROCEDURES, AND GUIDELINES

Drop Policy

If you discover that you need to drop this class, you must complete the [Drop Request](#) Dynamic Form through Warrior Web.

[https://dynamicforms.ngwebsolutions.com/casAuthentication.ashx?InstID=eaed95b9-f2be-45f3-a37d-46928168bc10&targetUrl=https%3A%2F%2Fdynamicforms.ngwebsolutions.com%2Fsubmit%2FForm%2Fstart%2F53b8369e-0502-4f36-be43-f02a4202f612].

Faculty cannot drop students; this is always the responsibility of the student. The Registrar's Office will provide a deadline on the Academic Calendar for which the form must be completed. Once you submit the completed form to the Registrar's Office, you must go into Warrior Web and confirm that you are no longer enrolled. If you still show as enrolled, FOLLOW-UP with the Registrar's Office immediately. You are to attend class until the procedure is complete to avoid penalty for absence. Should you miss the drop deadline or fail to follow the procedure, you will receive an F in the course, which may affect your financial aid and/or VA educational benefits.

Academic Integrity

Texas A&M University-Central Texas values the integrity of the academic enterprise and strives for the highest standards of academic conduct. A&M-Central Texas expects its students, faculty, and staff to support the adherence to high standards of personal and scholarly conduct to preserve the honor and integrity of the creative community. Any deviation by students from this expectation may result in a failing grade for the assignment and potentially a failing grade for the course. All academic misconduct concerns will be referred to the Office of Student Conduct. When in doubt on collaboration, citation, or any issue, please contact your instructor before taking a course of action.

For more [information regarding the Student Conduct process](https://www.tamuct.edu/student-affairs/student-conduct.html),
[https://www.tamuct.edu/student-affairs/student-conduct.html].

If you know of potential honor violations by other students, you may [submit a report](https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=0),
[https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=0].

Academic Accommodations

At Texas A&M University-Central Texas, we value an inclusive learning environment where every student has an equal chance to succeed and has the right to a barrier-free education. The Office of Access and Inclusion is responsible for ensuring that students with a disability receive equal access to the university's programs, services and activities. If you believe you have a disability requiring reasonable accommodations, please contact the Office of Access and Inclusion, WH-212; or call (254) 501-5836. Any information you provide is private and confidential and will be treated as such.

For more information, please visit our [Access & Inclusion](https://tamuct.instructure.com/courses/717) Canvas page (log-in required)
[https://tamuct.instructure.com/courses/717]

Important information for Pregnant and/or Parenting Students

Texas A&M University-Central Texas supports students who are pregnant and/or parenting. In accordance with requirements of Title IX and related guidance from US Department of Education's Office of Civil Rights, the Dean of Student Affairs' Office can assist students who are pregnant and/or parenting in seeking accommodations related to pregnancy and/or parenting. Students should seek out assistance as early in the pregnancy as possible. For more information, please visit [Student Affairs](https://www.tamuct.edu/student-affairs/pregnant-and-parenting-students.html) [https://www.tamuct.edu/student-affairs/pregnant-and-parenting-students.html]. Students may also contact the institution's Title IX Coordinator. If you would like to read more about these [requirements and guidelines](http://www2.ed.gov/about/offices/list/ocr/docs/pregnancy.pdf) online, please visit the website [http://www2.ed.gov/about/offices/list/ocr/docs/pregnancy.pdf].

Title IX of the Education Amendments Act of 1972 prohibits discrimination on the basis of sex and gender—including pregnancy, parenting, and all related conditions. A&M-Central Texas is able to provide flexible and individualized reasonable accommodation to pregnant and parenting students. All pregnant and parenting students should contact the Associate Dean in the Division of Student Affairs at (254) 501-5909 to seek out assistance. Students may also contact the University's Title IX Coordinator.

Tutoring

Tutoring is available to all A&M-Central Texas students, on a remote online basis. Visit the Academic Support Community in Canvas to view schedules and contact information. Subjects tutored on campus include Accounting, Advanced Math, Biology, Finance, Statistics, Mathematics, and Study Skills. Student success coaching is available online upon request.

If you have a question regarding tutor schedules, need to schedule a tutoring session, are interested in becoming a tutor, success coaching, or have any other question, contact Academic Support Programs at (254) 501-5836, visit the Office of Student Success at 212F Warrior Hall, or by emailing studentsuccess@tamuct.edu.

Chat live with a tutor 24/7 for almost any subject from on your computer! Tutor.com is an online tutoring platform that enables A&M-Central Texas students to log in and receive online tutoring support at no additional cost. This tool provides tutoring in over 40 subject areas except writing support. Access Tutor.com through Canvas.

University Writing Center

University Writing Center: Located in Warrior Hall 416, the University Writing Center (UWC) at Texas A&M University–Central Texas (A&M–Central Texas) is a free service open to all A&M–Central Texas students. For the Fall 2021 semester, the hours of operation are from 10:00 a.m.-5:00 p.m. Monday thru Thursday in Warrior Hall 416 (with online tutoring available every hour as well) with satellite hours available online only Monday thru Thursday from 6:00-9:00 p.m. and Saturday 12:00-3:00 p.m.

Tutors are prepared to help writers of all levels and abilities at any stage of the writing process. While tutors will not write, edit, or grade papers, they will assist students in developing more effective composing practices. By providing a practice audience for students' ideas and writing, our tutors highlight the ways in which they read and interpret students' texts, offering guidance and support throughout the various stages of the writing process. In addition, students may work independently in the UWC by checking out a laptop that runs the Microsoft Office suite and connects to WIFI, or by consulting our resources on writing, including all of the relevant style guides. Whether you need help brainstorming ideas, organizing an essay, proofreading, understanding proper citation practices, or just want a quiet place to work, the UWC is here to help!

Students may arrange a one-to-one session with a trained and experienced writing tutor by making an appointment via WOnline at <https://tamuct.mywconline.com/>. In addition, you can email Dr. Bruce Bowles Jr. at bruce.bowles@tamuct.edu if you have any questions about the UWC, need any assistance with scheduling, or would like to schedule a recurring appointment with your favorite tutor by making an appointment via WOnline at <https://tamuct.mywconline.com/>. In addition, you can email Dr. Bruce Bowles Jr. at bruce.bowles@tamuct.edu if you have any questions about the UWC, need any assistance with scheduling, or would like to schedule a recurring appointment with your favorite tutor.

University Library

The University Library provides many services in support of research across campus and at a distance. We offer over 200 electronic databases containing approximately 400,000 eBooks and 82,000 journals, in addition to the 96,000 items in our print collection, which can be mailed to students who live more than 50 miles from campus. Research guides for each subject taught at A&M-Central Texas are available through our website to help students navigate these resources. On campus, the library offers technology including cameras, laptops, microphones, webcams, and digital sound recorders.

Research assistance from a librarian is also available 24 hours a day through our online chat

service, and at the reference desk when the library is open. Research sessions can be scheduled for more comprehensive assistance, and may take place virtually through WebEx, Microsoft Teams or in-person at the library. Assistance may cover many topics, including how to find articles in peer-reviewed journals, how to cite resources, and how to piece together research for written assignments.

Our 27,000-square-foot facility on the A&M-Central Texas main campus includes student lounges, private study rooms, group work spaces, computer labs, family areas suitable for all ages, and many other features. Services such as interlibrary loan, TexShare, binding, and laminating are available. The library frequently offers workshops, tours, readings, and other events. For more information, please visit our [Library website](http://tamuct.libguides.com/index) [http://tamuct.libguides.com/index].

A Note about Sexual Violence at A&M-Central Texas

Sexual violence is a serious safety, social justice, and public health issue. The university offers support for anyone struggling with these issues. University faculty are mandated reporters, so if someone discloses that they were sexually assaulted (or a victim of Domestic/Dating Violence or Stalking) while a student at TAMUCT, faculty members are required to inform the Title IX Office. If you want to discuss any of these issues confidentially, you can do so through Student Wellness and Counseling (254-501-5955) located on the second floor of Warrior Hall (207L).

Sexual violence can occur on our campus because predators often feel emboldened, and victims often feel silenced or shamed. It is incumbent on ALL of us to find ways to actively create environments that tell predators we don't agree with their behaviors and tell survivors we will support them. Your actions matter. Don't be a bystander; be an agent of change. For additional information on campus policy and resources visit the [Title IX webpage](https://www.tamuct.edu/compliance/titleix.html) [https://www.tamuct.edu/compliance/titleix.html].

Behavioral Intervention

Texas A&M University-Central Texas cares about the safety, health, and well-being of its students, faculty, staff, and community. If you are aware of individuals for whom you have a concern, please make a referral to the Behavioral Intervention Team. Referring your concern shows you care. You can complete the [referral](https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=2) online [https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=2].

Anonymous referrals are accepted. Please see the [Behavioral Intervention Team](https://www.tamuct.edu/bit) website for more information [https://www.tamuct.edu/bit]. If a person's behavior poses an imminent threat to you or another, contact 911 or A&M-Central Texas University Police at 254-501-5800.

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Code of Academic Honesty. All alleged violations will be reported to the Office of Student Conduct.

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