

FSC115 Introduction to Forensic Science

(3 credit hours)

Course Syllabus

Course Description

This course will provide a general introduction to the field of forensic science and its various functions and specialties from the crime scene to the laboratory.

Course Learning Outcomes

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

1. List the common types of physical evidence encountered at crime scenes.
2. Explain the steps to be taken for protecting, searching, and recording the crime scene.
3. Describe the physical and chemical methods of analysis used in a comprehensive crime laboratory in the criminal justice system.
4. Define individual and class characteristics and give examples of physical evidence possessing these characteristics.
5. Explain the purpose physical evidence plays in reconstructing the events surrounding the commission of a crime.
6. Identify steps of the scientific method, conduct calculations and measurement using the SI units.

Prerequisites/Corequisites

None.

Required Textbook(s) and Resources

For this course a digital copy of your textbook is included with your DragonACCESS fees. Use the DragonACCESS tool in Moodle to view your book.

Saferstein, R. (2021). *Criminalistics: An introduction to forensic science (13th ed.)*. New York: Pearson.

Be sure to also review the weekly **Explore** sections for additional library or web resources. For access to databases, research help, and writing tips, visit the [Tiffin University Library](#). You might consider registering for one of the library's many webinars on library research, source

evaluation, copyright, and other topics, at the [Library Events - Upcoming Events](#) web page. For further assistance email a librarian, at: library@tiffin.edu.

Time Commitment

Effective time management is possibly the single most critical element to your academic success. To do well in this online class you should plan your time wisely to maximize your learning through the completion of readings, discussions, and assignments. Because of our accelerated, seven-week term, TU online courses are designed with the expectation that you dedicate a little over **six (6)** hours per credit hour to course activities and preparation **each week**. For example, for successful completion of a three-credit, seven-week online course you should reserve roughly **twenty (20) hours per week**.

To help plan your time and keep on track toward successful course completion, note the distinctive rhythm of assignment due dates:

7. All times assume Eastern Time (GMT-4).
8. Weeks begin at 12:00 a.m. ET on Monday and end at 11:55 p.m. ET on Sunday.
9. Unless otherwise noted, initial assignments or discussion posts are due by **11:55 p.m. ET on Wednesdays**.
10. Additional assignments or follow-up discussion posts are due by **11:55 p.m. ET on Saturdays, and**
11. Major assignments and reflections are typically due by **11:55 p.m. ET on Sundays**.

Learning Activities

This course will consist of a combination of discussions, case studies and written activities. Students should carefully review the “tips for success” as these are designed to help put you in the right mindset toward completing the specific task along with key ingredients to maximize your abilities. Students should also compare the learning objectives for each of the assignments as this too may aid in the completion of the various tasks.

The topics covered start with traditional crime scene evidence to modern investigative techniques. This will be applied weekly and students will be examining and evaluating a mock crime scene that will be the capstone to the course.

Grading

The chart below identifies the individual contributions from each type of activity, per week.

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Total
Discussions Activity 1.1 (n/a) Activity 1.2 (20)	Discussions Activity 2.1 (20) Activity 2.2 (20)	Discussions Activity 3.1 (20) Activity 3.2 (20)	Discussions Activity 4.1 (20) Activity 4.2 (20)	Discussions Activity 5.1 (20) Activity 5.2 (20)	Discussions Activity 6.1 (20)	Discussions Activity 7.1 (20) Activity 7.2 (20)	240
Case Study Activity 1.3 (55)	Case Study Activity 2.3 (55)	Course Project Activity 3.3 (55)	Course Project Activity 4.3 (55)	Course Project Activity 5.3 (55)	Course Project Activity 6.2 (55)	Final Project Activity 7.3 (130)	460
Assignments Activity 1.4 (50)	Assignments Activity 2.4 (50)	Assignments Activity 3.4 (50)	Assignments Activity 4.4 (50)	Assignments Activity 5.4 (50)	Assignments Activity 6.3 (50)		300
125	145	145	145	145	125	170	1000

Grading Scale

Grade	Percentage
A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	< 60%

Please see the [Academic Bulletin](#) for grade appeal information.

Course Schedule and Weekly Checklist

Topic	Learning Activities (Due by 11:55 p.m. ET on day designated)
Start Here	<input type="checkbox"/> MON: Activity 1.1: Introductory Forum - Initial Post
Week 1: Criminalistics Crime laboratories	<input type="checkbox"/> WED: Activity 1.2: Crime Labs Near You - Initial Post <input type="checkbox"/> SAT: Activity 1.2: Crime Labs Near You - Secondary Posts <input type="checkbox"/> SUN: Activity 1.3: Case Study: Deductive Reasoning <input type="checkbox"/> SUN: Activity 1.4: The Crime Scene and Evidence Examination
Week 2: Physical evidence Bloodstain patterns Probability Product rule Forensic databases	<input type="checkbox"/> WED: Activity 2.1: Assessing the Value of Physical Evidence - Initial Post <input type="checkbox"/> WED: Activity 2.2: Bloodstain Patterns - Initial Post <input type="checkbox"/> SAT: Activity 2.1: Assessing the Value of Physical Evidence - Secondary Posts <input type="checkbox"/> SAT: Activity 2.2: Bloodstain Patterns - Secondary Posts <input type="checkbox"/> SUN: Activity 2.3: Case Study: Physical Evidence, Probability and the Product Rule <input type="checkbox"/> SUN: Activity 2.4: Forensic Databases
Week 3: Autopsy Facial Recognition Biometrics Fingerprints	<input type="checkbox"/> MON: Activity 3.1: The Autopsy - Select an Autopsy Report <input type="checkbox"/> WED: Activity 3.1: The Autopsy - Initial Post <input type="checkbox"/> WED: Activity 3.2: Crime Scene at Home - Initial Post <input type="checkbox"/> SAT: Activity 3.1: The Autopsy - Secondary Posts <input type="checkbox"/> SAT: Activity 3.2: Crime Scene at Home - Secondary Posts <input type="checkbox"/> SUN: Activity 3.3: Introduction to Course Project <input type="checkbox"/> SUN: Activity 3.4: Biometrics in Boston

Topic	Learning Activities (Due by 11:55 p.m. ET on day designated)
Week 4: Firearms Ballistics Hair & Fibers NIBIN	<input type="checkbox"/> WED: Activity 4.1: Firearms - Initial Post <input type="checkbox"/> WED: Activity 4.2: Hair Analysis - Initial Post <input type="checkbox"/> SAT: Activity 4.1: Firearms - Secondary Posts <input type="checkbox"/> SAT: Activity 4.2: Hair Analysis - Secondary Posts <input type="checkbox"/> SUN: Activity 4.3: Course Project - Hair and Cellular Records <input type="checkbox"/> SUN: Activity 4.4: Hairs and Fibers
Week 5: Illicit Drugs Toxicology Oxidation Opioids Scheduled Drugs	<input type="checkbox"/> WED: Activity 5.1: Drug Addiction - Initial Post <input type="checkbox"/> WED: Activity 5.2: Toxicology - Initial Post <input type="checkbox"/> SAT: Activity 5.1: Drug Addiction - Secondary Posts <input type="checkbox"/> SAT: Activity 5.2: Toxicology - Secondary Posts <input type="checkbox"/> SUN: Activity 5.3: Course Project - Toxicology Report <input type="checkbox"/> SUN: Activity 5.4: The Opioid Epidemic
Week 6: Blood DNA CODIS	<input type="checkbox"/> MON: Activity 6.1: DNA - Select Your Case <input type="checkbox"/> WED: Activity 6.1: DNA - Initial Post <input type="checkbox"/> SAT: Activity 6.1: DNA - Secondary Posts <input type="checkbox"/> SUN: Activity 6.2: Course Project - Blood, Vomit and Hair <input type="checkbox"/> SUN: Activity 6.3: DNA Research Paper
Week 7: Mobile forensics Digital forensics	<input type="checkbox"/> MON: Activity 7.1: Mobile Forensics - Select Your Case <input type="checkbox"/> WED: Activity 7.1: Mobile Forensics - Initial Post <input type="checkbox"/> WED: Activity 7.2: Digital Forensics - Initial Post <input type="checkbox"/> THU: Activity 7.3: Course Project - Final Paper <input type="checkbox"/> SAT: Activity 7.1: Mobile Forensics - Secondary Posts <input type="checkbox"/> SAT: Activity 7.2: Digital Forensics - Secondary Posts

Tips for Success

Successful online learning requires a good deal of self-discipline and self-direction. As seekers of the truth, we should be willing to challenge and review one another's academic work in a spirit of respectful comradery and constructiveness. Your course is a place for you

to stretch and grow as you benefit from the expertise, knowledge, experience and diverse perspectives of your instructor and peers. Constructive feedback will challenge you to stretch your own thinking, thereby expanding your knowledge, understanding and application.

To get the most out of your learning experience, you should actively engage (participate) in **ALL** course activities. Course elements are arranged chronologically. To complete a week, simply work your way "down the page" through all of the course materials and activities.

Your Instructor Will Expect You to:

- Thoroughly review orientation materials (Start Here) within the first 48 hours of the term.
- Monitor your TU email account **daily** for important updates and announcements.
- Take ownership of your learning experience and act in a proactive, self-directed manner. That means:
 - Fully participate in all learning activities.
 - Complete assignments as described in rubrics or other instructions.
 - Submit all work on time and in the specified format (e.g. APA format for citations).
 - Utilize and incorporate instructor provided feedback to improve your work.
 - Ask questions so you can better understand course material or assignments.
 - Use the highest standards of intellectual honesty and integrity. For more information, see the TU Library guide: [Digital Literacy: Netiquette and Internet Safety](#).
 - Treat others respectfully and demonstrate "netiquette" (online politeness and respectfulness) at all times. TU celebrates cultural uniqueness and expects all students to be considerate and thoughtful throughout their learning experiences.

You Should Expect Your Instructors to:

- Post an introductory announcement/email at the beginning of each week to provide updates and help you prepare for the week's activities.
- Maintain an active and engaged presence in all course activities and throughout the course.
- Respond to your emailed questions within 48 hours, if not sooner.
- Clearly communicate any absences or expected non-participation due to extenuating circumstances. For example, "I will be traveling to attend a funeral this week and may not be able to respond to questions or participate in forums for a couple of days."
- When grading your work:
 - clearly indicate their grading approach (what they like to see in submitted work as well as what types of errors they tend to penalize more harshly),

- thoroughly review and evaluate your submissions in a timely manner (in less than 5 days for most assignments), and
- provide constructive feedback that indicates the strengths and weaknesses of your work and provides suggestions on how you can improve your performance on future assignments.
- Advocate for your success as a learner and help guide you toward successful completion of the course activities and most importantly, attainment of the course learning outcomes.

Accommodations

The **Office for Disability Services** supports the institutional commitment to diversity by providing educational opportunities for qualified individuals with disabilities through accessible programs and services in compliance with Section 504 of the Rehabilitation Act of 1973 and Title III of the Americans with Disabilities Act (ADA) of 1990.

If you need reasonable accommodations due to a documented disability, contact the Office for Equity, Access, & Opportunity 419.448.3021 or via email at disabilityservices@tiffin.edu.

Additional Resources & Support

For technical support, either email moodlesupport@tiffin.edu or call the 24/7 Technical Support Call Center at 855-664-1200.

If you need to consult an academic advisor refer to TU's [Meet the Team](#) page.

For information about TU's peer tutoring program see the Murphy Center's [Tutoring Policies and Procedures](#) page. Veterans and active military can seek assistance from TU's [Veteran and Military Services Web Page](#).

Comments or Concerns

TU's online programs are designed to be student *driven*: to empower you with a voice and stake in your learning. Our courses feature multiple and varied ways that you can share feedback, and we invite you to become an active voice and help drive our improvement efforts. In addition to providing in-course feedback, we encourage you to submit questions or comments directly to the online team at online@tiffin.edu.