

FSC115L Introduction to Forensic Science Lab (1 credit hour) Course Syllabus

Course Description

This course is a required complement to the lecture course. Students will be expected to apply the concepts learned in the lecture to the laboratory experiments. It is designed to provide a general introduction to the field of forensic science and the preservation of physical evidence from the crime scene to analysis in the crime 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.

Prerequisites/Corequisites

Corequisite – FSC115

Required Textbook(s) and Resources

For this course you will need to obtain the following materials:

- Week 2: (one of the following combinations):
 - 4 oz evaporated milk, 3 tablespoons tomato paste, red food coloring
 - o dry milk powder, water red food coloring
 - white corn syrup, red food coloring
- Week 3: (all items listed):

- Several sheets of blank paper
- Ink, magic marker, powder, or pencil
- Magnifying glass or camera
- Week 7:
 - A cell phone

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

Saferstein, R. (2021). Criminalistics: An Introduction to Forensic Science (13th ed.).

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 <u>Tiffin University Library</u>. You might consider registering for one of the library's many webinars on library research, source evaluation, copyright, and other topics, at the <u>Library Events - Upcoming Events</u> web page. For further assistance email a librarian, at: <u>library@tiffin.edu</u>.

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:

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

Learning Activities

This lab course will take a "hands on" approach to most of the assignments which will require students to use their creativity to complete the various activities as outlined in the instructions. Students will analyze the specifics of different types of crime scene evidence and articulate its

value toward the criminal investigation. This will allow for the practical application of such evidence and how it can impact the case, both pro and con.

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 (40)	Discussions Activity 2.1 (40)	Discussions Activity 3.1 (40)	Discussions Activity 4.1 (45)	Discussions Activity 5.1 (45)	Discussions Activity 6.1 (45)	Discussions Activity 7.1 (45)	300
Assignments Activity 1.2 (100)	Assignments Activity 2.2 (100)	Assignments Activity 3.2 (100)	Assignments Activity 4.2 (100)	Assignments Activity 5.2 (100)	Assignments Activity 6.2 (100)	Assignments Activity 7.2 (100)	700
140	140	140	145	145	145	145	1000

Grading Scale

Grade	Percentage
А	90-100%
В	80-89%
С	70-79%
D	60-69%
F	< 60%

Please see the <u>Academic Bulletin</u> for grade appeal information.

Course Schedule and Weekly Checklist

Topic	Learning Activities (Due by 11:55 p.m. ET on day designated)
Week 1: Crime Scene Sketching Evidence Crime Scenes Evidence Analysis	 MON: Activity 1.1: Crime Scene Sketching - Initial Post SAT: Activity 1.1: Crime Scene Sketching - Secondary Posts SUN: Activity 1.2: Evidence and the Crime Scene
Week 2: Physical Evidence Crime Scenes Bloodstain Analysis Week 3: Fingerprints Biometrics Facial Recognition	 □ WED: Activity 2.1: Evidence and Crime Scene Searches - Initial Post □ SAT: Activity 2.1: Evidence and Crime Scene Searches - Secondary Posts □ SUN: Activity 2.2: Collection of Physical Evidence □ WED: Activity 3.1: Your Fingerprints - Initial Post □ SAT: Activity 3.1: Your Fingerprints - Secondary Posts □ SUN: Activity 3.2: Facial Recognition
Week 4: Ballistics National Integrated Ballistic Information Network (NIBIN) Firearms Week 5: Drug Recognition Experts (DRE) Toxicology	 WED: Activity 4.1: National Integrated Ballistics Information Network - Initial Post SAT: Activity 4.1: National Integrated Ballistics Information Network - Secondary Posts SUN: Activity 4.2: Firearms and Trajectory WED: Activity 5.1: Drug Recognition Experts - Initial Post SAT: Activity 5.1: Drug Recognition Experts - Secondary Posts SUN: Activity 5.2: Celebrity Overdose Presentation

Topic	Learning Activities (Due by 11:55 p.m. ET on day designated)				
Week 6:	WED: Activity 6.1: DNA and the Innocence Project - Initial Post				
DNA Innocence Project	 SAT: Activity 6.1: DNA and the Innocence Project - Secondary Posts 				
innocence i roject	☐ SUN: Activity 6.2: CODIS and Convictions				
Week 7:					
Mobile Forensics	D MED Askidu 7 A Makila Farancias Initial Deat				
Digital Forensics	□ WED: Activity 7.1: Mobile Forensics - Initial Post□ SAT: Activity 7.1: Mobile Forensics - Secondary Posts				
Computer Investigations	☐ SUN: Activity 7.1: Wobile Forensics - Secondary Fosts				
Cyber Crime					

Tips for Success

Online learning requires self-discipline and self-direction. As seekers of the truth, we should be willing to challenge one another's academic work in a spirit of respectful comradery. Your course is a place for you to grow as you benefit from the expertise, experience, and diverse perspectives of your instructor and peers. Constructive feedback will challenge you to stretch your own thinking, thereby expanding your knowledge and understanding.

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.
 - o 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: <u>Digital Literacy: Netiquette and Internet</u> 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 (Disability Services)

The Office of 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 via email at disabilityservices@tiffin.edu or by calling 419-448-3021.

Technical Support

For Moodle support, either email moodlesupport@tiffin.edu or call the 24/7 Technical Support Call Center at 855-664-1200 (3430, Option 2, from on-campus). For non-Moodle support, contact the Tiffin University ITS helpdesk at the number above or submit a support ticket.

Veterans

The Veteran and Military Resource Center assists veterans, active Military, and spouses of current service members in utilizing their education benefits. VMRC provides information regarding benefit processes and procedures, as well as support in navigating the transition from military to academic life by facilitating connections with the appropriate support services on campus. More information can be found on the Veteran and Military Resource Center website, at http://www.tiffin.edu/va.

Additional Support

If you need to consult an academic advisor refer to TU's <u>Meet the Team</u> page. For information about TU's peer tutoring program see the Murphy Center's <u>Tutoring Policies and Procedures</u> 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.