**Wayland Mission Statement**

Wayland Baptist University exists to educate students in an academically challenging, learning-focused, and distinctively Christian environment for professional success, and service to God and humankind.

**Contact Information**

**Course**

: JUAD 3324 - FORENSICS

**Campus**

: WAYLAND BAPTIST UNIVERSITY ONLINE

**Term/Session**

**:** SPRING 2024 – 2ND 8 WEEKS

**Instructor**

**:** Ernesto Ramirez-Amaya

**Office Phone Number**

**:** 806-518-4932

**WBU Email Address**

**:** ernesto.amaya@wayland.wbu.edu

**Office Hours, Building, and Location**

**:** NO OFFICE HOURS – EMAIL, CALL, OR TEXT

**Class Meeting Time and Location**

**:** ONLINE

**Textbook Information**

**Required Textbook(s) and/or Required Materials**

**: Bertino, Anthony / Bertino, Patricia Nolan; Forensic Science: Fundamentals and Investigations, 3rd Edition; Publisher: Cengage; ISBN: 978-0-357-36172-6; Publication: 2020**

*The textbook for this course is part of the* ***Wayland’s Automatic eBook*** *program. You will have access to an eBook and interactive learning material on the first day of class through your Blackboard course site. The cost of this Automatic eBook will be billed directly to your student account when you register for the course. You will be notified via email with access instructions and additional information. If you do not wish to participate in the Automatic eBook program, you will have the first 12 days of class to opt-out of the program (additional details will be outlined in your email instructions). For more information on the Automatic eBook program, visit the Wayland Bookstore* [*Automatic eBook FAQ*](https://bookstore.wbu.edu/site_inclusive.asp) *page.*

**Optional Materials**

**:** NO OPTIONAL MATERIALS SHALL BE NEEDED

**Course Information**

**Catalog Description**

**:**  Covers police procedures specifically related to patrol activities.

**There is no prerequisite for this course.**

**Course Outcome Competencies**

**:** Upon completion of this course, students will be able to:

* Describe the purpose of forensic science
* Describe the goal of crime scene investigation
* Explain why hair serves as a valuable source of evidence
* Discuss the relationship between fibers, yarns, and textiles and how they can serve as a valuable source of trace evidence
* Identify different sources of botanical evidence and the reasons why it is an important form of evidence
* Summarize the history of fingerprinting including the development of new systems used in fingerprint analysis and identification
* Explain the value of DNA evidence and how it differs from other circumstantial evidence
* Discuss the specific events in the history of blood-spatter analysis
* Define toxicology and the methods by which toxicologists examine and detect the effects of harmful substances on the human body
* Discuss what is involved in document analysis and the training required to become a certified document analyst
* Describe several examples of how forensic entomology is used to help solve crimes
* Explain the forensic importance of examining death, and the role of the coroner, medical examiner, and pathologist in death investigations
* Explain why soil is considered a valuable form of trace evidence
* Identify the importance of anthropology in a forensic investigation and the characteristics anthropologists use to build a biological profile of skeletal remains
* Explain the importance of glass evidence in forensic investigation
* Discuss the value of impressions as class evidence and their ability to provide evidence possible suspect(s) and crime-scene events
* Identify examples of tools and tool marks and the value of this type of evidence in a crime-scene investigations

**Attendance Requirements**

**WAYLAND BAPTIST UNIVERSITY - ONLINE**

External Campuses

Students enrolled at one of the university’s external campuses should make every effort to attend all class meetings. All absences must be explained to the instructor, who will then determine whether the omitted work may be made up. When a student reaches the number of absences considered by the instructor to be excessive, the instructor will advise the student and file an unsatisfactory progress report with the external campus executive director/dean. Any student who misses 25 percent or more of the regularly scheduled class meetings may receive a grade of F in the course. Additional attendance policies for each course, as defined by the instructor in the course syllabus, are considered a part of the university’s attendance policy. A student may petition the Academic Council for exceptions to the above stated policies by filing a written request for an appeal to the Vice President of Academic Affairs.

Plainview Campus

The university expects students to make class attendance a priority. Faculty members provide students with a copy of attendance requirements. These are provided on the first day of class. Students in programs for which an outside agency (such as the Veteran’s Administration) has stricter attendance requirements will be subject to those requirements. In addition, the university registrar will provide each student affected a list of these regulations. The dean of the school must approve part-time and adjunct faculty class attendance requirements prior to syllabi distribution.

WBUonline (Virtual Campus)

Students are expected to participate in all required instructional activities in their courses. Online courses are no different in this regard; however, participation must be defined in a different manner. Student “attendance” in an online course is defined as active participation in the course as described in the course syllabus. Instructors in online courses are responsible for providing students with clear instructions for how they are required to participate in the course. Additionally, instructors are responsible for incorporating specific instructional activities within their course and will, at a minimum, have weekly mechanisms for documenting student participation. These mechanisms may include, but are not limited to, participating in a weekly discussion board, submitting/completing assignments in Blackboard, or communicating with the instructor. Students aware of necessary absences must inform the professor with as much advance notice as possible in order to make appropriate arrangements. Any student absent 25 percent or more of the online course, i.e., non-participatory during 2 or more weeks of an 8-week session, may receive an F for that course. Instructors may also file a Report of Unsatisfactory Progress for students with excessive non-participation. Any student who has not actively participated in an online class prior to the census date for any given session is considered a “no-show” and will be administratively withdrawn from the class without record. To be counted as actively participating, it is not sufficient to log in and view the course. The student must be submitting work as described in the course syllabus. Additional attendance and participation policies for each course, as defined by the instructor in the course syllabus, are considered a part of the university’s attendance policy.

**University Policies**

**Statement on Plagiarism and Academic Dishonesty**

**:** Wayland Baptist University observes a zero-tolerance policy regarding academic dishonesty. Per university policy as described in the academic catalog, all cases of academic dishonesty will be reported and second offenses will result in suspension from the university.

**Disability Statement**

**:** In compliance with the Americans with Disabilities Act of 1990 (ADA), it is the policy of Wayland Baptist University that no otherwise qualified person with a disability be excluded from participation in, be denied the benefits of, or be subject to discrimination under any educational program or activity in the university. The Director of Counseling, Career and Disability Services serves as the coordinator of students with disabilities and should be contacted concerning accommodation requests at (806) 291-3765. Documentation of a disability must accompany any request for accommodations.

Accessibility issues with content in WBUonline courses or in Blackboard should be addressed to the WBU accessibility coordinator, Dr. Trish Ritschel-Trifilo, [trifilot@wbu.edu](mailto:trifilot@wbu.edu) or call (806) 291-3745.

**Student Grade Appeals**

**:** Students shall have protection through orderly procedures against prejudices or capricious academic evaluation. A student who believes that he or she has not been held to realistic academic standards, just evaluation procedures, or appropriate grading, may appeal the final grade given in the course by using the student grade appeal process described in the Academic Catalog. Appeals may not be made for advanced placement examinations or course bypass examinations. Appeals are limited to the final course grade, which may be upheld, raised, or lowered at any stage of the appeal process. Any recommendation to lower a course grade must be submitted through the Vice President of Academic Affairs to the Faculty Assembly Grade Appeals Committee for review and approval. The Faculty Assembly Grade Appeals Committee may instruct that the course grade be upheld, raised, or lowered to a more proper evaluation.

WBU Catalog

**Course Requirements and Grading Criteria**

THREE TESTS AT 100 POINTS PER TEST = 300 POINTS

SIX DISCUSSION QUESTIONS AT 50 POINTS PER DISCUSSION = 300 POINTS

DISCUSSIONS WILL BE PLACED ON BLACKBOARD ON THE DISCUSSION TAB FORUM

**The University has a standard grade scale:**

A = 90-100, B = 80-89, C = 70-79, D = 60-69, F= below 60, W = Withdrawal, WP = withdrew passing, WF = withdrew failing, I = incomplete. An incomplete may be given within the last two weeks of a long term, within the last week of an 8-week session, or within the last two days of a microterm to a student who is passing, but has not completed a term paper, examination, or other required work for reasons beyond the student’s control. A grade of “incomplete” is changed if the work required is completed prior to the last day of the next long 16-week term or 8-week session unless the instructor designates an earlier date for completion.  If the work is not completed by the appropriate date, the I is converted to an F.

**Tentative Schedule**

**JUAD 3324 – FORENSICS: CLASS OUTLINE**

**WEEK ONE:**

* ANSWER AND REPLY DISCUSSION ONE
* READ CHAPTER ONE AND KNOW THE FOLLOWING OBJECTIVES:

1. Describe the purpose of forensic science.
2. Explain the role and responsibilities of a forensic scientist.
3. Distinguish between observation and perception.
4. Distinguish between fact and opinion as the relate to eyewitness testimony.

* READ CHAPTER TWO AND KNOW THE FOLLOWINGOBJECTIVES:

1. Describe the goals of crime-scene investigation.
2. List the seven steps of a crime scene investigation.
3. Identify several advances in technology that have improved crime-scene investigations.

* READ CHAPTER THREE AND KNOW THE FOLLOWINGOBJECTIVES:

1. Explain why hair serves as a valuable form of evidence.
2. Discuss the structure and functions of hair.
3. Compare the structure of nonhuman hair and human hair.
4. Describe how to properly collect hair as evidence.

**WEEK TWO:**

* ANSWER AND REPLY DISCUSSION TWO
* READ CHAPTER FOUR AND KNOW THE FOLLOWINGOBJECTIVES:

1. Discuss the relationship between fibers, yarns, and textiles and how they can serve as a valuable source of trace evidence.
2. Describe the characteristics of fibers, yarns and textiles and how they provide scientific evidence in a forensics investigation.

* READ CHAPTER FIVE AND KNOW THE FOLLOWINGOBJECTIVES:

1. Identify the different sources of botanical evidence and the reasons why it is an important form of evidence.
2. Explain the science behind forensic palynology and other botanical fields of evidence, and how they contribute to the evaluation of crime scenes.
3. Know how to process a crime scene using botanical evidence.

* READ CHAPTER SIX AND KNOW THE FOLLOWINGOBJECTIVES:

1. Summarize the history of fingerprinting including the development of new systems used in fingerprint analysis and identification.
2. Describe fingerprints and how they are formed.
3. Explain how fingerprints are analyzed and the reliability of fingerprint identification.

**WEEK THREE:**

**TEST ONE: CHAPTERS 1 - 6**

* ANSWER AND REPLY DISCUSSION THREE
* READ CHAPTER SEVEN AND KNOW THE FOLLOWINGOBJECTIVES:

1. Explain the value of DNA evidence and how it differs from other circumstantial evidence.
2. Outline the history of DNA evidence, from early DNA fingerprinting to DNA profiling and the launch of CODIS.
3. Describe the process to properly collect, document, and process DNA evidence.

* READ CHAPTER EIGHT AND KNOW THE FOLLOWINGOBJECTIVES:

1. Discuss specific events in the history of blood-spatter analysis.
2. Describe the process of analyzing blood evidence at the crime scene and in a forensic crime lab.
3. Distinguish between different types of blood-spatter patterns.
4. Describe the method involved in testing, collecting, handling, and documenting blood evidence at a crime scene.

* READ CHAPTER NINE AND KNOW THE FOLLOWING OBJECTIVES:

1. Define toxicology and the methods by which toxicologists examine and detect the effect of harmful substances on the human body.
2. Describe the characteristics and effects of various harmful substances.
3. Summarize how to properly detect, document, and properly collect and package toxicological evidence.

**WEEK FOUR:**

* ANSWER AND REPLY DISCUSSION FOUR
* READ CHAPTER TEN AND KNOW THE FOLLOWINGOBJECTIVES:

1. Discuss what is involved in document analysis and the training required to become a certified document analyst.
2. Identify historical cases of significance related to handwriting analysis.
3. Provide examples of how criminals can forge checks, documents, and works of art.

* READ CHAPTER ELEVEN AND KNOW THE FOLLOWINGOBJECTIVES:

1. Describe several examples of how forensic entomology is used to help solve crimes.

**WEEK FIVE:**

* ANSWER AND REPLY DISCUSSION FIVE
* READ CHAPTER TWELVE AND KNOW THE FOLLOWINGOBJECTIVES:

1. Explain the forensic importance of examining death, and the role of the coroner, medical examiner, and the pathologist in death investigations.
2. Discuss the manner, cause, and the mechanism of death, and how death itself is defined by experts.
3. Explain the predictable sequence of changes that occur during the process of death, including algor, rigor and livor mortis.

**WEEK SIX:**

* **TEST TWO CHAPTERS 7 – 12**
* ANSWER AND REPLY DISCUSSION SIX
* READ CHAPTER THIRTEEN AND KNOW THE FOLLOWINGOBJECTIVES:

1. Explain why soil is considered a valuable form of evidence.
2. The distinguishing characteristics of different textures of sand.
3. Explain the procedures for properly collecting and documenting soil evidence and discovering and assessing gravesites.

* READ CHAPTER FOURTEEN AND KNOW THE FOLLOWINGOBJECTIVES:

1. Identify the importance of anthropology in a forensic investigation.
2. Explain how bones can help forensic anthropologists.
3. Describe techniques that anthropologists use to analyze bones.

* READ CHAPTER FIFTEEN AND KNOW THE FOLLOWINGOBJECTIVES:

1. Summarize how to determine the sequence of impacts on glass based on the fracture pattern.
2. Compare and contrast fracture patterns in tempered glass and window glass.
3. Know how to properly document and collect glass evidence.

**WEEK SEVEN**

* ANSWER AND REPLY DISCUSSION SEVEN
* READ CHAPTER SIXTEEN AND KNOW THE FOLLOWINGOBJECTIVES:

1. Know the value of impressions and their ability to provide evidence.
2. Be able to explain shoe and foot impressions and know what type of information they may provide during an investigation.
3. Explain how tire and thread impressions can provide valuable information.
4. Explain how dental impressions provide information.

* READ CHAPTER SEVENTEEN AND KNOW THE FOLLOWINGOBJECTIVES:

1. Identify examples of tools and tool markings.
2. Describe the unique tool mark evidence that tools produce and how the validity of that evidence is evaluated.
3. Describe how to properly photograph, document, collect, and preserve tool mark evidence.

**WEEK EIGHT**

**FINAL OVER CHAPTERS 13 - 18**

**Additional Information**

No Additional Information