

University of Maryland
Department of Anthropology
Introduction to Forensic Sciences
ANTH 221 Summer 2025
MTWThF 10:00 AM – 1:00 PM Woods Hall 0124C
Teaching Assistant: TBD
Office hours: TBD

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Course Description

The role of forensic scientists can be broadly defined in terms of skills, technology, experience, research, and contributions to the literature. This course will provide a brief history of forensic sciences, an introduction to some of the techniques used, and a demonstration of some of the applications of forensic sciences. There will be several hands-on activities in the classroom. This course is not a training course, but a survey course designed to give the student some exposure to the kinds of scientific knowledge and techniques applied to the medico-legal investigation of death and other crimes.

Attendance to all lectures is mandatory since much of the material in the examinations will be based on these class lectures, and the in-class activities will not be repeated.

Exams and Grading

The course will be graded on the basis of 300 points. There will be an examination each week on Friday morning. Each exam is worth 50 points. In-class exercises are part of the class and are not optional. Each student is required to submit a written summary of five of these exercises (instructions will be given in class). Each of these write-ups will be worth 20 points, so that all five together will be worth 100 points. The write-ups are due by the following class and no exceptions will be made. The final 50 points will be earned with class participation, which includes discussion. You will lose points for missing class. In addition, students **MAY NOT** use their computers, iPods, cell phones, Blackberries, or other electronic devices during class time except for class-related activities such as taking notes. This means **you may NOT tweet, IM, text, surf the web, or email during class time. You will lose 10 points each time you break this rule.**

Under most conditions, no makeup examinations will be provided. Incomplete (I) grades will be given only if a student has already completed at least 75% of the coursework and has a legitimate excuse for not finishing the work on time.

Other Course Information:

If any student has any special study or test-taking needs such as test anxiety, dyslexia, poor vision or hearing, or special seating requirements, please let the instructor know by the second class (July 15) so that we can make your participation in this course a rewarding one. In addition, the instructor will gladly make students aware of special services/facilities on this campus that might be of assistance in the course of your studies here at UMCP.

Required Text

You will need to purchase or rent the following book for this course:

McDermid, Val, 2014. *Forensics: What Bugs, Burns, Prints, DNA, and More Tell Us about Crime*. New York: Grove Press. ISBN 978-0-8021-2515-6.

Academic Integrity

The University of Maryland, College Park has a nationally recognized Code of Academic Integrity, administered by the Student Honor Council. This Code sets standards for academic integrity at Maryland for all undergraduate and graduate students. As a student you are responsible for upholding these standards for this course. It is very important for you to be aware of the consequences of cheating, fabrication, facilitation, and plagiarism. For more information on the Code of Academic Integrity or the Student Honor Council, please visit <http://www.shc.umd.edu>. All violations of the Code will be reported directly to the Young Scholars Program.

Course Schedule

The following course schedule includes weekly lecture topics, reading assignments and exam dates.

July 14 - Introduction to Forensic Sciences: What is a forensic expert, what kind of training is required, when is a forensic expert needed? History of Forensic Anthropology.

July 15 - Statistics in Forensic Sciences
In-class activity: Anthropometrics and Statistical Analysis
Reading: Preface

July 16 – Fine Art of Baloney Detection: How to make a good argument and detect a bad one

**Video: Infamous Colorado Cannibal
Identity and Personal Identification
In-class activity: interviews for descriptive identification of
missing persons**

**July 17 – Human Skeletal Biology: Basics
Reading: Chapter 8**

**July 18 – Examination 1
Human Skeletal Biology: Analytical Techniques
Video: Music Hall Bones
In-class activity: Identification of human bones; determination
of age and sex from the skeleton; normal versus pathological
specimens**

**July 21 – Guest Speaker: Miguel Vilar, PhD. DNA and Population Genetics
Reading: Chapter 7**

**July 22 – Inheritance and DNA; Race
Forensic Evidence: Biological Fluids**

**July 23 – Guest Speaker: Thomas Mauriello, Director. Lecture and Tour of
the Criminology and Criminal Justice Crime Laboratory
Reading: Chapter 1**

**July 24 – Archaeological Recovery versus Crime Scene Investigation
In-class activity: Crime Scene Simulation**

**July 25 – Examination
Forensic Evidence: Hair and Fibers
In-class activity: hair and fiber analysis**

**July 28 – Forensic Evidence: Questioned Documents
In-class exercise: Handwriting comparison
Reading: Chapter 10**

**July 29 –Forensic Evidence: Fingerprints
In-class exercise: Fingerprint scoring
Reading: Chapter 6**

**July 30 – Mass Disasters and Multiple Fatality Incidents
Video: The Hardin Cemetery**

**July 31 – Testimony; Ethics in Forensic Sciences
Other forensic sciences: Psychiatry, Engineering,
Jurisprudence, Digital and Multimedia**

Science
Reading: Chapter 12

August 01 – Human Rights and Forensic Science
Video: Mass Graves of Guatemala
Final Examination