Anth 221: Introduction to Forensic Sciences
Fall 2017 // T Th 6:00 - 7:15 PM // Woods Hall 0124C

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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.

COURSE OBJECTIVES

By the end of the semester, students will:
1. Possess a basic understanding of the branches of forensic science and their applications in society.
2. Understand how to apply the scientific method both broadly, and in the specific medicolegal context.
3. Be able to articulate the processes of collecting, categorizing, and examining evidence and data.
4. Have enhanced critical thinking and analysis skills.

REQUIRED TEXT

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


You may NOT use an earlier edition of the book.

Any additional course readings will be available on the web, through the University library’s journal subscriptions, or posted to ELMS.
EXAMS AND GRADING

The course will be graded on the basis of 340 points.

Attendance/Participation (~15%): 50 points will be earned with class attendance, which includes active participation in lab exercises and class discussions. You will lose points for missing class, or for unauthorized use of technology (see below). (50 pts)

Lab Exercises (~30%): 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), worth 20 points each. The write-ups are due the by the following class, must be submitted in person, and no exceptions will be made. (100 pts)

Critical Analysis Write-ups (~12%): Students are required to submit two critical analysis write-ups worth 20 points each during the course of the semester. Exact guidelines and due dates will be given in class. (40 pts)

Exams (~44%): There will be three examinations, each worth 50 points. (150 pts)

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.

A = ≥ 95%  B = 83-86.9%  C = 73-76.9%  D = 63-66.9%
A- = 90-94.9%  B- = 80-82.9%  C- = 70-72.9%  D- = 60-62.9%
B+ = 87-89.9%  C+ = 77-79.9%  D+ = 67-69.9%  F = < 60%

COURSE/UNIVERSITY POLICIES

Attendance: You are expected to be in every class. You are allowed two absences for any reason; any additional absence will result in a loss of 5 points per missed class.

Tardiness/Leaving Early: Just like it’s important for you to be in class, it’s important for you to be here on time and to stay for the duration. You are expected to be here at 6:00 pm and to remain until we’ve finished (barring any illnesses or other emergencies). Three instances of tardiness or leaving early will count as an absence. If you miss more than twenty minutes of class (on either end, or combined), you will be marked absent.

Technology: The compulsion to attend to one or more screens makes it difficult for you to be engaged and present for the 2.5 hours we have together each week. While I love technology as much as the next person, and we will occasionally utilize it for out-of-class assignments, I ask that your laptops, cell phones, e-readers, etc. remain off and out of sight during class time. Students are strongly encouraged to take notes with pen and paper. In addition to removing the temptation to cruise Facebook, track your Twitter feed, or otherwise not be psychologically present in class, research has shown that hand-written notes are more effective for learning and retaining information than typed notes.
If you have a *compelling* reason for using a laptop to take notes, please come talk to me. If it is necessary to use your phone, please leave the room before doing so; however, missing more than 20 minutes cumulatively in one class period will result in an absence.

As a matter of habit, I ask that you **please turn off and put your phones away when you walk into the lab, and leave them there until dismissal. You will lose 10 points for any phone/electronics sighting that we have not previously discussed.**

**Accessibility and Accommodation:** Students with special study or test-taking needs, please let the instructor know by the second class so that we can work together and make your participation in this course a rewarding one. All accommodation requests should go through the University of Maryland’s Accessibility & Disability Service office (https://www.counseling.umd.edu/ads/), and a letter be provided to the instructor no later than August 31st. **If you are struggling in your classes for any reason, I urge you to contact this office as soon as possible to access the support you need to succeed.**

**Weather/Cancellations:** In the case of inclement weather, this course will adhere to official University closings and delays which can be found on the University’s homepage (www.umd.edu) and the weather emergency phone line (301-405-7669). Any class cancellation will also be communicated via the course listserv (ELMS or UMEG).

**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.

To further exhibit your commitment to academic integrity, remember to sign the Honor Pledge on all examinations and assignments: "I pledge on my honor that I have not given or received any unauthorized assistance on this examination (assignment)."

**COURSE SCHEDULE**

The following course schedule includes weekly lecture topics, reading assignments and exam dates. One “field trip” to a forensic laboratory is also being arranged.

**Course Schedule is subject to change, pending guest speaker availability,**

**August 29 – Introduction to Forensic Sciences: What is a forensic expert, what kind of training is required, when is a forensic expert needed?**

**August 31 – History of Forensic Anthropology.**

**September 5 – Statistics in Forensic Sciences**
Reading: Chapter 1, Introduction

September 7 – In-class activity: Anthropometrics and Statistical Analysis

September 12 – Fine Art of Baloney Detection: How to make a good argument and detect a bad one

September 14 – Video: Infamous Colorado Cannibal

September 19 – Identity and Personal Identification

September 21 – In-class activity: interviews for descriptive identification of missing persons (VIP form)

September 26 – Human Skeletal Biology: Basics
   Reading: Chapter 5

September 28 – Human Skeletal Biology: Analytical Techniques

October 3 – In-class activity: Identification of human bones; determination of age and sex from the skeleton; normal versus pathological specimens

October 5 – Video: Music Hall Bones

October 10 – Exam I

October 12 – Archaeological Recovery versus Crime Scene Investigation
   Reading: Chapters 2 & 3

October 17 – Lecture and tour of the Criminology and Criminal Justice Crime Laboratory, Thomas Mauriello, Director.

October 19 – Guest Speaker: Aaron Tyler, Investigator, Prince George’s County Fire/EMS, Office of the Fire Marshal, Fire Investigations Division
   Reading: Chapter 16

October 24 - Inheritance and DNA; Race
   Reading: Chapters 14 & 15

October 26 – Forensic Evidence: Hair and Fibers
   In-class activity: hair and fiber analysis
   Reading: Chapter 10

October 31 – Forensic Evidence: Questioned Documents
   In-class exercise: Handwriting comparison
Reading: Chapter 17

November 2 – Exam II

November 7 – Forensic Evidence: Fingerprints
   Reading: Chapter 6

November 9 – In-class exercise: Fingerprint scoring

November 14 – Other forensic sciences: Psychiatry, Engineering,
   Jurisprudence, Digital and Multimedia
   Science

November 16 – Video: Post Mortem

November 21 – Mass Disasters and Multiple Fatality Incidents

November 23 - Thanksgiving

November 28 – Video: The Hardin Cemetery

November 30 - Testimony; Ethics in Forensic Sciences
   Reading: Chapter 19

December 5 – Forensic Anthropology Cases

December 7 – Human Rights and Forensic Science; Video: Mass Graves in
   Guatemala

Final Exam: TBD