

UNIVERSITY OF FLORIDA  
DEPARTMENT OF ANTHROPOLOGY  
FALL 2007

**ANT 4740, SECTION 7879 – INTRODUCTION TO FORENSIC SCIENCE**

**Instructor:** Heather Freiman, M.A.

**E-mail:** hfreiman@ufl.edu

**Course Time:** MWF, Period 4 (10:40am-11:30am)

**Course Location:** Little Hall, Room 101

**Office Location:** Turlington Hall, Room

**Office Hours:** Monday 2:30pm-3:30pm, Thursday 10:00am-12:00pm, and by appointment.

**Course website:** Accessed through WebCT Vista (<http://lss.at.ufl.edu/>), login with your Gatorlink Username and password.

**Course Description:** Forensic science encompasses the skills and expertise of individuals from a multitude of scientific disciplines to assist in the investigation of cases of legal significance. This course is designed to provide the student with a broad introduction to techniques utilized by today's forensic professionals. We will explore the application of the physical and social sciences in specialized forensic contexts, investigation of a crime scene, the role of law enforcement crime labs, and other important issues relating to forensic investigation. Class lectures, guest lectures, readings, and video presentations will be used to enhance the students' understanding of a broad spectrum of issues in the modern forensic sciences.

**Textbook and Readings:** There is no required textbook for the class, but there is an optional recommended text. Students will be responsible for all required readings posted on WebCT throughout the semester and announced in class.

**Optional/Recommended Text:**

James, Stuart H. and Jon J. Nordby (eds.) *Forensic Science: An Introduction to Scientific and Investigative Techniques*. 2<sup>nd</sup> Edition, Boca Raton: CRC Press, 2005. ISBN: 0849327474.

Although this text is not required for the course, it will be useful as a reference to review topics covered during lecture. The first edition of this text is also acceptable for use as a reference.

**Attendance:** Although attendance will not always be taken, attendance is critical. Since there is not a required textbook for this course, it is imperative that students attend all lectures in order to learn the material which will be covered on the exams. Many topics discussed in this course are only briefly covered in the recommended text. The instructor will **not** distribute lecture notes or PowerPoint presentations outside of in-class lectures. If you miss a class, you must make arrangements to get notes from a classmate.

Students must arrive to class *on time!* **Cell phones, pagers, and all other mobile devices (e.g. MP3 players, PSPs, etc.) must be turned off during class.**

**Exams:** There will be four non-cumulative exams that cover material from lectures, assigned readings, guest lectures, and films presented in class. All exams **must be taken during the scheduled time** except in extreme circumstances. Any rescheduling is subject to the discretion of the instructor and must be discussed with the instructor **at least one week before missing the scheduled exam.**

**Extra Credit:** Extra credit will not be given on an individual basis. Two to three extra credit assignments will be given during the semester each worth 10 possible points. Details of the assignments and due dates will be announced later in the semester and posted on the WebCT page.

**Grading:** Exams = 100 points each (400 total), Extra Credit = 10 points each

Your grade for this course will be out of 400 points. Grades will be based on the following percentages; however, the instructor reserves the right to curve grades in order to achieve a fair distribution.

**Final grade guidelines:**

A 90-100%; B+ 89-87%; B 86-80% C+ 79-77%, C 70-76%, D+ 67-69%, D 60-66%, E <60%.

**Academic Honesty:** As a result of completing the registration form at the University of Florida, every student has signed the following statement: "I understand the University of Florida expects its students to be honest in all their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University."

Anyone that is caught cheating on an exam will receive a "0" and be reported to the departmental chair. Plagiarism or cheating in any form is subject to university policy as outlined by the Dean of Students

(<http://www.dso.ufl.edu/judicial/academichonestystudent.html>).

**Classroom Accommodation:**

Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation. Students experiencing personal problems that are interfering with their academic performance are encouraged to contact the University Counseling Center (301 Peabody Hall, 392-1575), Student Mental Health (Student Health Care Center, 392-1171), or Sexual Assault Recovery Services (Student Health Care Center, 392-1161).

## COURSE OUTLINE / LECTURE SCHEDULE

### SCHEDULE

### SUGGESTED READING

#### WEEK 1: Introduction to the Course

August 24: Introduction to the course; Syllabus review: expectations, grading and assignments

#### WEEK 2: Introduction to Forensic Science, Forensic Pathology and the Medical Examiner

August 27: What is forensics? Who are forensic scientists? Development of the field

Forward; Chapter 1

August 29: The role of the forensic pathologist; Medical examiner system; Cause and manner of death

Chapter 2

August 31: The Medical examiner system continued

Chapter 2

#### WEEK 3: Death Investigation & Forensic Odontology

September 3: No class - Labor Day

September 5: Death Investigation

Chapter 4

September 7: Forensic Odontology

Chapter 6

#### WEEK 4: Forensic Anthropology and Forensic Taphonomy

September 10: Forensic Anthropology

Chapter 7

September 12: Human variability and the biological profile

September 14: Forensic Taphonomy, Archaeology and the Postmortem Interval

Chapter 8

#### WEEK 5: Forensic Archaeology, Exam 1

September 17: Forensic Archaeology

September 19: Exam 1 Review

September 21: Exam 1

**WEEK 6: Forensic Entomology, Forensic Toxicology,  
Forensic Psychology**

September 24: Forensic Entomology	Chapter 9, <a href="http://www.forensicentomology.com">www.forensicentomology.com</a>
September 26: Forensic Toxicology and Controlled Substances	Chapter 5, 22
September 28: Forensic Psychology/Psychiatry	Chapter 28 & 29

**WEEK 7: Criminal Profiling, Crime Scene Investigation,  
Trace Evidence**

October 1: Criminal Profiling	Chapter 31
October 3: Crime Scene Investigation and the Crime Lab	Chapter 10, 12
October 5: Trace Evidence: glass, hair, fibers & soil	Chapter 16

**WEEK 8: Trace Evidence, Exam 2**

October 8: Trace Evidence: paint, tape, fingerprints, gunshot residue	Chapter 17
October 10: Exam 2 Review	
October 12: Exam 2	

**WEEK 9: Bloodstain Patterns & Testing, DNA**

October 15: Bloodstain Patterns	Chapter 11, 13
October 17: How blood is tested at the scene and in the lab, Biological fluids, staining and identification	Chapter 12, 13, 14
October 19: Introduction to DNA	Chapter 16

**WEEK 10: Forensic DNA, Questioned Documents**

October 22: Forensic DNA	Chapter 16
October 24: Legal Issues in Forensic DNA Testing	Chapter 34
October 26: Questioned Documents	Chapter 21

**WEEK 11: Footwear and Tire Impressions**

October 29: Footwear and Tire Impressions

Chapter 18, 19

October 31: Exam 3 Review

November 2: No Class - Homecoming

**WEEK 12: Exam 3, Tool mark and Firearm analysis**

November 5: Exam 3

November 7: Firearm Analysis; Tool mark analysis

Chapter 20

November 9: Tool mark analysis

**WEEK 13: Arson, Vehicular Accidents, Mass Fatalities**

November 12: No Class - Veterans' Day

November 14: Arson, Fire & Explosions

Chapter 24

November 16: Vehicular accident reconstruction, Mass fatalities

Chapter 25, 23

**WEEK 14: Mass Fatalities**

November 19: Mass fatalities: trains, planes and buildings

Chapter 23

November 21 & 23: No Class - Happy Thanksgiving!

**WEEK 15: Legal Aspects of Forensic and Ethics**

November 26: Legal Aspects of Forensic Science

November 28: Ethics and the Future of the Forensic Science

Chapter 32, 33

November 30: Who wants to be a forensic scientist?

**WEEK 16: Exam 4**

December 3: Exam 4 Review

December 5: EXAM 4

The suggested chapters correspond to the 2<sup>nd</sup> edition of the text.

Additional (required) readings will be posted on WebCT and announced in class.

**Note:** This syllabus is a guideline. The instructor reserves the right to make minor modifications due to the availability of potential Guest Speakers or Subject Matter Experts not currently on the schedule. No substantive assignment changes will be made.