

FORENSIC EVIDENCE
Spring 2010 Syllabus 5.0
Mondays & Wednesdays 10:30a-11:45a
Room 330

Professor Jessica D. Gabel
jdgabel@gsu.edu
404.413.9196

COURSE DESCRIPTION:

This course will examine selected topics in the forensic sciences devoted to the investigation and trial of both civil and criminal cases. Primary attention will be given to the investigation and trial of criminal cases. The course topics will consist of legal and scientific aspects of the investigative and trial processes. Legal analyses will focus primarily on issues of criminal and civil discovery and the debate over the legal requirements for certain scientific concepts. Outside speakers may be invited to make presentations.

By the end of this course, you should be able to (1) understand aspects of certain scientific disciplines and methodologies; (2) apply legal rules and case law scientific evidence; (3) utilize that knowledge to analyze evidence civil and criminal cases; and (4) learn how to communicate and develop that knowledge effectively in practice.

GRADING:

You will be evaluated on the basis of:

- Final Paper OR take home exam (if not using the course for writing requirement)
- Participation “wild card”

There will also be ungraded “pop” quizzes throughout the semester. Those quizzes will not affect your grade.. The quizzes are designed to assess your understanding of the material and progress in the course at regular intervals.

Attendance:

I take class attendance and participation very seriously. College of Law’s academic regulations (and the American Bar Association accreditation rules) require regular and punctual attendance. Although I cannot expect everyone’s attendance to be perfect, I will watch for instances of regular or prolonged absences, and I will enforce the regulations as necessary.

Attendance will be taken at the beginning of every class. You have two “free” absences. Additional missed classes may affect your grade. If you are having trouble with attendance, please come see me early in the semester to discuss the problem.

*I reserve the right to raise or lower your grade by one half-step based on participation **and** attendance. For example, if your grade at the end of the semester is a B-, your class participation may bring the final grade to a B or a C+.*

Office hours and other scheduling logistics:

My regular office hours will be from 2:00-4:00pm on Mondays and 10:00 – 11:00am Tuesdays (unless I'm out of town). Please provide advance notice if you plan to drop by. In addition, I encourage you to make an appointment for another time that is convenient for you. The best way to reach me is by e-mail (jdgabel@gsu.edu). If you need to reach me in a hurry, please call me on my cell (415.994.2122). My office phone is 404.413.9196, but I don't check my messages remotely, so if I'm not in my office, I won't get any messages you leave on my phone there.

Please note that I prepare for class in the hour before class. Unless you are actually on fire or you have an equivalent emergency, please do not disturb me during this time.

REQUIRED MATERIALS:
Forensic Evidence – Professor Gabel – Spring 2010 – Assignments

TEXT BOOK: Richard Saferstein, FORENSIC SCIENCE:
 FROM THE CRIME SCENE TO THE CRIME LAB (2009) (“CRIME”).

SUPPLEMENTS: Collected cases and articles (subject to change). Those materials can be downloaded on the course webpage.

Be prepared to discuss the readings below on the day scheduled.

Week of	Monday	Wednesday
Jan. 11	<p><i>Introduction to the Crime Scene & Forensic Evidence Primer</i></p> <p>CRIME Ch. 1, 2, & 5.</p> <p><u>Supplement:</u></p> <ul style="list-style-type: none"> • Federal Rules of Evidence – 2000 Amendment to FED. R. EVID. 702 • <i>Forensic Science – Oxymoron?</i> (Kennedy) • <i>The CSI Effect: Popular Fiction About Forensic Science Affects the Public’s Expectations About Real Forensic Science</i> (Saks) • <i>CSI Myths: The Shaky Science Behind Forensics</i> • <i>Forensics Symposium: The Use and Misuse of Forensic Evidence; Admissibility of Scientific Evidence</i> (Gianelli) 	<p><i>Introduction to Scientific & Expert Evidence</i></p> <p><u>Supplement:</u></p> <ul style="list-style-type: none"> • <i>NAS Report – Executive Summary</i> • <i>NAS Report, Ch. 4: The Principles of Science and Interpreting Scientific Data</i> • <i>How Science Works</i> (pp. 68-81) (Goodstein) • <i>Forensic Science Under the Microscope</i> (Gianelli) • <i>Evaluating Scientific & Forensic Evidence</i> (Underwood) • <i>Irreconcilable Differences: The Troubled Marriage of Science and Law</i> (Haack)

Week of	Monday	Wednesday
Jan. 18	<p><i>MLK Day</i></p>	<p><i>Fingerprints</i></p> <p>CRIME Ch. 7</p> <p><u>Supplement:</u></p> <ul style="list-style-type: none"> • <i>NAS Report</i>, Ch. 10 (skim) • <i>The Myth of Fingerprints</i> (Imwinkelried & Cherry) • <i>Forensics: Lessons from the Brandon Mayfield Case</i> (Thompson & Cole) • <i>New Hampshire v. Rose Langill</i>, 945 A.2d 1 (N.H. 2008) • <i>Maryland v. Bryan Rose</i>, Case No. K06-0545 (MD. Cir. Ct., Oct. 19, 2007)
Jan. 25	<p><i>Fingerprints/Trace Evidence I</i></p> <p>CRIME Ch. 12</p> <p><u>Supplement:</u></p> <ul style="list-style-type: none"> • <i>NAS Report</i>, Chapter 5 (skim) • <i>Evaluating and Challenging Forensic Identification Evidence</i> (Tobin & Thompson) 	<p><i>Trace Evidence II</i></p> <p>CRIME Ch. 13</p> <p><u>Supplement:</u></p> <ul style="list-style-type: none"> • <i>Forensic: GSR</i> (Thompson) • <i>Forensic Hair Comparison: Background Information for Interpretation</i> (FBI) • <i>Forensic Hair Morphology Comparison – A Dying Art or Junk Science?</i> 44 Science & Justice 2, 95 (J. Taupin)

Week of	Monday	Wednesday
Feb. 1	<p><i>Firearms, Toolmarks, & Impressions I</i></p> <p>CRIME Ch. 8</p> <p><u>Supplement:</u></p> <ul style="list-style-type: none"> • <i>NAS Report</i>, Ch. 5, at 150-155 (skim) • <i>Is a Match Really a Match? A Primer on the Procedures and Validity of Firearm and Toolmark Identification</i> (FBI) • <i>United States v. Green</i>, 405 F. Supp. 2d 104 (D. Mass. 2005) • <i>U.S. v. Ramirez</i>, 810 So. 2d 836 (Fla. 2002). 	<p><i>Firearms, Toolmarks, & Impressions II</i></p> <p><u>Supplement:</u></p> <ul style="list-style-type: none"> • <i>Challenging Firearms and Toolmark Identification</i> Parts I and II (Schwartz) • <i>Bowling v. Commonwealth of Kentucky</i>, 2005 WL 3116032 (Ken. App. 2005).
Feb. 8	<p><i>Forensic Toxicology & Drugs</i></p> <p>CRIME Ch. 10-11</p> <p><u>Supplement:</u></p> <ul style="list-style-type: none"> • <i>Reference Guide on Toxicology</i> (pp. 401-437) • <i>Forensic Analysis of Marijuana and the Kurzman Mystery</i> (Whitehurst) • <i>Judge Orders Trial in Death of Anna Nicole Smith</i> (Reuters) • Michael Jackson articles 	<p><i>Crime Scene Reconstruction</i></p> <p>CRIME Ch. 6</p> <p><u>Supplement:</u></p> <ul style="list-style-type: none"> • Inman & Rudin: <i>Principles and Practices of Criminalistics: the Profession of Forensic Science</i> (Ch. 7) pp. 157-192 • <i>Crime Seen</i> Wired Magazine

Week of	Monday	Wednesday
Feb. 15	<p><i>Trial Issues for the Prosecutor</i></p> <p><u>Supplement:</u></p> <ul style="list-style-type: none"> • <i>Winning Forensic Evidence Cases - Sometimes Without Even Using an Expert</i> (Imwinkelried & Cherry) • <i>Prosecutors, Ethics, and Expert Witnesses</i> (Giannelli) • <i>Melendez-Diaz v. Massachusetts</i>, 557 U.S. ____, 129 S.Ct. 2527 (2009). 	<p><i>Arson & Explosions</i></p> <p>CRIME Ch. 15-16</p> <p><u>Supplement:</u></p> <ul style="list-style-type: none"> • <i>Certification of Bomb Sniffing Dogs</i> • <i>Airport Bomb-Sniffing Dogs Fail Tests</i> • David Grann, <i>Trial by Fire: Did Texas Execute an Innocent Man?</i> (The New Yorker)
Feb. 22	<p><i>Medico-legal Death Investigation I</i></p> <p>CRIME Ch. 9</p> <p><u>Supplement:</u></p> <ul style="list-style-type: none"> • NAS Report, Chapter 9 	<p><i>Medico-legal Death Investigation II</i></p> <p><u>Supplement:</u></p> <ul style="list-style-type: none"> • <i>Death Investigation: A Guide for the Scene Investigator</i> (DOJ) • <i>Introduction to Forensic Pathology</i>
Mar. 1	<p><i>DNA I</i></p> <p>CRIME Ch. 13</p> <p><u>Supplement:</u></p> <ul style="list-style-type: none"> • <i>Principles of Forensic DNA for Officers of the Court</i> • <i>Forensic DNA Fundamentals for the Prosecutor</i> 	<p><i>DNA II</i></p> <p>CRIME Ch. 14</p> <p><u>Supplement:</u></p> <ul style="list-style-type: none"> • <i>Using DNA to Solve Cold Cases</i> (NIJ) • <i>Statistical Weight of a DNA Match in Cold-Hit Cases</i> (FBI)
Mar. 8	<p><i>Spring Break</i> <i>No Class</i></p>	<p><i>Spring Break</i> <i>No Class</i></p>

Week of	Monday	Wednesday
Mar. 15	<p><i>Bitemarks</i></p> <p><u>Supplement:</u></p> <ul style="list-style-type: none"> • <i>Modern Scientific Evidence</i> • <i>The Bite-Marks Men</i> 	<p><i>Handwriting</i></p> <p>CRIME Ch. 17</p> <p><u>Supplement:</u></p> <ul style="list-style-type: none"> • <i>Modern Scientific Evidence</i>
Mar. 22	<ul style="list-style-type: none"> • <i>No Class</i> 	<p><i>Computer Forensics</i></p> <p>CRIME Ch. 18-19</p> <p><u>Supplement:</u></p> <ul style="list-style-type: none"> • <i>Computer Forensics: Bringing the Evidence to Court</i> • <i>Computer Forensics (US-CERT)</i> • <i>Drawing the Line on Computer Forensic Expert and Lay Testimony (Fed. Ev. Rev.)</i>
Mar. 29	<p><i>Statistics</i></p> <p><u>Supplement:</u></p> <ul style="list-style-type: none"> • <i>Causation, Statistics, & the Law (Scheines)</i> • <i>What Traditional Statistics Don't Tell You About Causal Claims (Goodman)</i> • <i>Statistics in Court: The Ultimate Communication Challenge (Chaseling)</i> 	<p><i>Civil Cases</i></p> <p><u>Supplement:</u></p> <ul style="list-style-type: none"> • <i>Commercial Damages and Valuations After Daubert (Weitnauer)</i> • <i>Reference Guide on Estimation of Economic Losses in Damages Awards (pp. 280-328).</i>

Week of	Monday	Wednesday
April 5	<p><i>Forensic Psychology</i></p> <p><u>Supplement:</u></p> <ul style="list-style-type: none"> • Modern Scientific Evidence: Children’s Memory and Testimony §§17:1-17:12 • <i>Misuse of Psychological Testimony in Forensic Settings</i> • Other materials TBD 	<p><i>Forensic Anthropology</i></p> <p><u>Supplement</u></p> <ul style="list-style-type: none"> • <i>Kumho, Daubert, and the Nature of Scientific Inquiry: Implications for Forensic Anthropology</i> (Grivas & Komar) 53 Journal of Forensic Sciences 4, 771-776 (July 2008).
April 12	<ul style="list-style-type: none"> • <i>Final Exam/Paper Preview</i> 	<p><i>Wrongful Convictions</i></p> <p><u>Supplement:</u></p> <ul style="list-style-type: none"> • <i>Invalid Forensic Science Testimony and Wrongful Convictions</i>, 95 VA. L. REV. 1 (2009) (Neufeld & Garrett)
April 19	<p><i>Using Experts in Court – issues for the lawyer</i></p> <p><u>Supplement:</u></p> <ul style="list-style-type: none"> • <i>Management of Expert Evidence</i> (pp. 41-63) • <i>Making Experts Count</i> (Levy) 	<p><i>Laboratory Policy & Procedure</i></p> <p><u>Supplement:</u></p> <ul style="list-style-type: none"> • <i>Worst Crime Lab in the Country?</i> (New York Times) • <i>Houston Has a Problem: Bad DNA Evidence Sent the Wrong Man to Prison at Least Once. How Many More are There and What Can be Done About It?</i> (Thompson) • <i>NAS Report</i>, Chapters 6 & 7
April 26	<i>Final Exam Review</i>	<i>No Class – Final Exam Review Period Begins</i>

Spring 2010 Speakers – Forensic Evidence

Date	Name(s)	Agency	Topic
Jan. 25	Lou Cuendet and Matt Cleland	GBI	Fingerprints
Feb. 1	Christopher Robinson (director) + 2 analysts	Atlanta PD Crime Lab	Firearms and Toolmarks
Feb. 8	Tom Hoppen, forensic chemist	ATF	Trace evidence and toxicology
Feb. 10	Patrick Bailey, chief investigator	Dekalb County Medical Examiner's Office	Crime scene reconstruction/blood spatter
Feb. 15	Joe Burford	Prosecuting Attorney's Council of Georgia	Trial tactics with experts (prosecution)
Feb. 17	Brett Bowers + Glow bomb sniffing dog	ATF	Arson and explosives
Feb. 22	Dr. Mario Musunjac	Emory University	Forensic pathology
Feb. 24	John Cross, deputy director	Fulton County Medical Examiner's Office	Crime scene investigation (mock crime scene day)
March 1	Judge C.J. Becker	Superior Court	DNA in court
March 3	Ted Staples	GBI	DNA analysis
March 17	Beau Stigler	GBI	Forensic Computer Analysis
March 31	John C. "Kit Weitnauer"	Alston & Bird	Business valuation experts
April 5	Dr. Blake Keasey	n/a	Forensic psychology
April 7	Dr. Rick Snow	UT Body Farm	Forensic anthropology
April 12	Professor Kobi Abayomi	Georgia Tech	Litigation and DNA statistics
April 19	Sam Maizel	Pachulski Stang	Trial Tactics II