

FRNSC 801 — Criminalistics III

SYLLABUS — Spring 2019

PRIMARY

INSTRUCTOR: Ralph R. Ristenbatt III
E-mail: rrr20@psu.edu
Phone: +1-814-867-0503
Office: 325C Whitmore Lab
Office hours: by appointment

SUPPORTING

FACULTY: Jack Hietpas jzh333@psu.edu
Stewart Hung sxh611@psu.edu
Reena Roy rxr34@psu.edu

Class location: 302 Boucke
Days & times: MON & WED 1800-1955 HR

Brief course description:

Advanced CSI investigation, criminalistics, and scene reconstruction with mock courtroom testimony.

Prerequisites: FRNSC 410, FRNSC 411, FRNSC 413, FRNSC 415, and FRNSC 821 or FRNSC 831

Students who do not meet these prerequisites after being informed in writing by the instructor may be dis-enrolled during the first 10-day free add-drop period:

<http://www.psu.edu/dept/oue/aappm/C-5.html>. If you have not completed the listed prerequisites, promptly consult with an instructor. Students who re-enroll after being dis-enrolled according to this policy are in violation of Item 15 in the Student Code of Conduct:

<http://studentaffairs.psu.edu/conduct/codeofconduct/>.

Course

management: CANVAS will be used extensively for communication and posting course material.

Required

textbooks: All textbooks used in Penn State Forensic Science program courses including, but not limited to, FRNSC 400, 410, 411, 413, 415, 421, 425, 475, 427, 532, 541, 561, 821, and 831.

Suggested

reading: Chisum WJ, Turvey BE. Crime reconstruction. 2nd ed. Amsterdam (NL): Academic Press; 2011.

Committee on Identifying the Needs of the Forensic Science Community/National Research Council. Strengthening forensic science in the United States: a path forward. Washington, D.C.: National Academy of Sciences; 2009.

Inman K, Rudin R. Principles and practice of criminalistics: the profession of forensic science. Boca Raton (FL): CRC Press; 2001.

Enrollment Requirements:

FRNSC-MPS program

Other Required Materials:

Access/knowledge of CANVAS and Internet

Course Syllabus Modifications:

- Changes to this syllabus may be made as deemed appropriate by the course instructor. Students will be notified in writing/email if changes occur.
- Changes to the syllabus, class schedule, announcements, etc. will be communicated in class and/or via email. Students are REQUIRED to check their Penn State and CANVAS e-mail at least daily.

Information Literacy:

Students will recognize when research is required and will have the ability to access, analyze, integrate, and evaluate information from a variety of sources. These sources include, but are not limited to, Penn State library databases, published and other written materials, and computer sources (Internet, databases, etc.).

Expected Course Behavior:

- Students are expected to be actively involved in their acquisition of knowledge. Every student is responsible for all assigned reading, material presented in class, and computer-assisted and delivered instructional material.
- All students are expected to behave ethically and with honor and integrity (see Academic Integrity Policy).
- Cell phones **MUST BE SILENCED AT ALL TIMES**.
- Texting during class will result in the student being asked to leave and the student will be counted as absent.
- Behavior deemed as disruptive to the instructor or fellow students (i.e., cell phone use, texting, excessive chatting, etc.) may result in the student being asked to leave. If you are asked to leave, you will be counted as absent for the entire class. If the behavior continues, the instructor has the right to ask that the student be removed from the course.

Attendance Considerations (see Attendance Policy):

- The instructor reserves the right to require written documentation of any event(s) leading to missed classes (funerals, hospitalization, physician's office visit, etc.).
- If a student is absent, they will be responsible for all content that has been covered on that day. This includes lecture content, announcements, assignments, and any other material distributed to the class. The student is also responsible to be prepared for the next class.

Examinations:

- Cell phones must be silenced and not on the person during exams.
- No electronic/wearable devices are allowed during exams.
- No food or drink items are allowed in the testing rooms during exams.
- No head coverings are permitted to be worn during exams.
- If a student misses an exam:
 - The student must e-mail the course instructor within 24 hours of the absence with a plan for completing the missed examination. If emergent circumstances prevent e-mail correspondence within 24 hours, the instructor must be notified as soon as possible.
 - Documentation of the event must be provided to the course instructor and a plan for completing the missed examination must be implemented by the student.
 - If an examination is missed, it must be completed before the next laboratory session. If emergent circumstances prevent a make-up before the next laboratory session, the instructor must be notified as soon as possible.
 - It is the instructor's prerogative to administer an alternative format examination for any make-up examination.
- Additional requirements/instructions may be given at the start of an examination.

Other Assessment Requirements:

- Students are responsible for keeping a back-up copy of all submitted take-home work.
- All assignments are due on the date and time specified unless otherwise determined by the instructor (see Late Submission Policy).
- Additional requirements/instructions may be given at the time an assessment is assigned.

Course Description

Classroom discussions will expand on the analysis of commonly encountered evidence to demonstrate its usefulness in real-crime investigation. Students will be given problems to research for which there will be real-life examples in either the literature or in court records. Using a problem solving technique, students will research and examine actual analytical data, interpret it and then testify to it in mock court situations. After researching actual cases, students will demonstrate their ability to critically analyze crime scenes. Scenes will be mocked up at the university crime scene house, Spruce Cottage, selected because of their complexity. Students will analyze evidence obtained after processing a crime scene. The students' laboratory analysis will encompass a variety of physical evidence types that will test a student's ability to select an analytical scheme that makes sense in the context of the current case. Integral in this process is the understanding of the operation of criminalistics laboratories and how it relates to the quality assurance function of the laboratory.

The course is an 800-level forensic science course required for the Master of Professional Studies in Forensic Science and it is the capstone course for completion of the degree.

Course Goals & Objectives

- Introduce students to physical evidence triage and case assessment
- Provide real cases for students to assess
 - Students will present findings in writing and presentations
 - Provide feedback for each assessment style
- Enhance understanding of competency and proficiency tests through design, construction, and participation
- Enhance understanding of QA/QC, accreditation, and certification
- Enhance understanding of protocol development and method validation
- Stress importance of professional organizations
- Stress importance of certification and provide guidance on the American Board of Criminalistics Forensic Science Assessment Test (FSAT)
- Refine résumé building skills and discuss foundations and preparation of a professional curriculum vitae
- Provide a mock job interview experience with feedback
- Provide a mock cross examination experience with feedback
- Provide a capstone oral examination with feedback

Course Calendar

Date (Day)	Description
JAN 07 (M)	Course introduction; collection of non-disclosure agreement, FSAT application, and waiver; FL v. Zeigler (provision of case records, assignment discussion, and group formation)
JAN 09 (W)	Discussion — Case review/evaluation practices and crime scene reconstruction; provision of proficiency test assignment
JAN 14 (M)	Discussion — QA/QC; Accreditation — ASCLD/LAB and ANSI-ASQ; FSAT discussion
JAN 16 (W)	OPEN CLASS; RÉSUMÉ DUE ELECTRONICALLY AND CREATION OF LINKEDIN.COM PROFILE (FRIDAY, 2017-01-18 by 1700 HR)
JAN 21 (M)	NO CLASS — Martin Luther King Jr. holiday
JAN 23 (W)	Discussion — Careers in FS: Resources, Application Processes, Expectations, Interview Strategies
JAN 28 (M)	Mock job interview — student 1 (1800-1840 hr); student 2 (1840-1920 hr); student 3 (1920-2000 hr); OPEN CLASS
JAN 30 (W)	Mock job interview — student 4 (1800-1840 hr); student 5 (1840-1920 hr); student 6 (1920-2000 hr); OPEN CLASS
FEB 04 (M)	Group presentation #1 ; group 1 (1800-1900 hr); group 2 (1900-2000 hr)
FEB 06 (W)	OPEN CLASS
FEB 11 (M)	OPEN CLASS
FEB 13 (W)	Group presentation #2 ; group 1 (1800-1900 hr); group 2 (1900-2000 hr)
FEB 18 (M)	OPEN CLASS; PROFICIENCY TEST — CASE FOLDER & LAB REPORT DUE; DIRECT EXAMINATION Q&As DUE
FEB 20 (W)	OPEN CLASS; PA v. Witman (provision of case records and assignment) and provision of method development, validation, and protocol assignment
FEB 25 (M)	Oral exam #1 — student 1 (1800-1840 hr); student 2 (1840-1920 hr); student 3 (1920-2000 hr); OPEN CLASS
FEB 27 (W)	Oral exam #1 — student 4 (1800-1840 hr); student 5 (1840-1920 hr); student 6 (1920-2000 hr); OPEN CLASS
MAR 04 (M)	NO CLASS — SPRING RECESS
MAR 06 (W)	NO CLASS — SPRING RECESS
MAR 11 (M)	OPEN CLASS
MAR 13 (W)	Discussion — Professional Organizations; Certification; Proficiency Testing; Ethics and Bias
MAR 18 (M)	OPEN CLASS
MAR 20 (W)	OPEN CLASS
MAR 25 (M)	OPEN CLASS
MAR 27 (W)	OPEN CLASS; CRIME SCENE EXERCISE ASSIGNMENT DUE
APR 01 (M)	Oral examination #2 — student 1; OPEN CLASS
APR 03 (W)	Oral examination #2 — student 2; OPEN CLASS
APR 08 (M)	Oral examination #2 — student 3; OPEN CLASS
APR 10 (W)	Oral examination #2 — student 4; OPEN CLASS
APR 15 (M)	Oral examination #2 — student 5; OPEN CLASS
APR 17 (W)	Oral examination #2 — student 6; OPEN CLASS
APR 22 (M)	American Board of Criminalistics Forensic Science Assessment Test METHOD DEVELOPMENT, VALIDATION, AND PROTOCOL ASSIGNMENT DUE
APR 24 (W)	Final class discussion; WITMAN CASE ANALYSIS REPORT DUE
APR 29	NO FINAL EXAMINATION

Assessments

Assessment	Weight
Résumé and LinkedIn.com profile assessment	3.00%
Paper (method development, validation, and protocol assignment — written protocol)	5.00%
Paper (PA v. Witman — case analysis report)	10.00%
Group presentation #1 (FL v. Zeigler — analysis and review of chemical and trace evidence)	4.00%
Group presentation #2 (FL v. Zeigler case — analysis and review of biological and medical evidence)	8.00%
Proficiency test assignment (case folder)	15.00%
Proficiency test assignment (report)	5.00%
Crime scene exercise (Spruce and Pine Cottages)	5.00%
Mock job interview	10.00%
Oral examination #1 (direct examination questions and answers)	5.00%
Oral examination #1 (cross examination)	10.00%
Oral examination #2	20.00%
TOTAL	100.00%

Grades and Attendance

Grades

A	$93.000 \leq x \leq 100.00$
A-	$90.000 \leq x < 93.000$
B+	$87.000 \leq x < 90.000$
B	$83.000 \leq x < 87.000$
B-	$80.000 \leq x < 83.000$
C+	$77.000 \leq x < 80.000$
C	$70.000 \leq x < 77.000$
D	$60.000 \leq x < 70.000$
F	$x < 60.000$

Late Submission of Assignments

- 10% deduction/day (0001-2400 HR past due date & time)
- Maximum deduction = 100%
- Extensions will be granted for exigent circumstances (documentation may be requested!)

American Board of Criminalistics (ABC) Forensic Science Assessment Test (FSAT)

As outlined by the ABC*, a qualified student candidate must:

- Understand the major scientific principles behind forensic science analysis.
- Understand how to recognize, collect, secure, and preserve physical evidence.
- Understand how to perform physical, chemical, and/or biological analyses to locate and identify items having evidential value.
- Understand how to interpret and compare analytical data generated from the analyses of physical/chemical evidence and known exemplars.
- Understand how to recognize the potential for forensic examinations in areas outside an area of specialization, prioritize the sequence of examinations, and handle evidence accordingly.
- Evaluate the appropriateness and/or the appropriate method of securing samples.
- Understand the use of laboratory instrumentation.
- Observe safe practices to ensure the safety of analysts.
- Understand legal processes including courtroom testimony, relevant legal decisions and concepts.
- Recognize and employ quality assurance measures to ensure the integrity of the analyses.
- Understand the importance of impartial and ethical work practices.

****ABC FSAT Study Guide v1.1 January 2014***

http://www.criminalistics.com/uploads/3/2/3/3/32334973/fsat_study_guide_v1_1.pdf

It is strongly recommended that the ABC recommended FSAT references are reviewed prior to the examination.

FSAT references:

Crime Scene

Fisher BAJ. Techniques of crime scene investigation. 7th ed. Boca Raton: CRC Press, 2004.

Criminalistics and Forensic Science

Houck M, Siegel J. Fundamentals of forensic science. Burlington, MA: Elsevier Academic Press, 2006.

Saferstein R. Criminalistics: an introduction to forensic science. 7th ed. (or higher). Upper Saddle River, NJ: Prentice Hall, 2007.

Saferstein R, editor. Forensic science handbook, volume I. 2nd ed. Englewood Cliffs, NJ: Prentice Hall, 2002.

Saferstein R, editor. Forensic science handbook, volume II. 2nd ed. Englewood Cliffs, NJ: Prentice Hall, 2005.

Saferstein R, editor. Forensic science handbook, volume III. Englewood Cliffs, NJ: Prentice Hall, 1993.

Forensic Chemistry

Bell S. Forensic chemistry. Upper Saddle River, NJ: Pearson Prentice Hall, 2006.

Forensic DNA

Butler J. Forensic DNA typing. San Diego, CA: Academic Press, 2001.

Professional Conduct and Ethics

American Board of Criminalistics. Rules of professional conduct.

http://www.criminalistics.com/uploads/3/2/3/3/32334973/09-0001f_v1.0.1_abc_rules_of_professional_conduct.pdf.

Academic Integrity

All Penn State policies regarding ethics and honorable behavior apply to this course (see links below for policy statements). Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. All University policies regarding academic integrity apply to this course. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating of information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students. For any material or ideas obtained from other sources, such as the text or things you see on the web, in the library, etc., a source reference must be given. Direct quotes from any source must be identified as such. All examination answers must be your own, and you must not provide any assistance to other students during examinations. Any instances of academic dishonesty WILL be pursued under the University and Eberly College of Science regulations concerning academic integrity.

Discussion of course concepts and cooperative study are encouraged; however, collaboration, discussion, assistance, cheating, plagiarism, etc., are NOT permitted during examinations or other assignments as specified by the instructor. Integrity and ethics are considered exceptionally important by the instructor.

Code of Mutual Respect

The Code of Mutual Respect and Cooperation was developed to embody the values that we hope our faculty, staff, and students possess, consistent with the aspirational goals expressed in the Penn State Principles. The University is strongly committed to freedom of expression, and consequently, the Code does not constitute University or College policy, and is not intended to interfere in any way with an individual's academic or personal freedoms. We hope, however, that individuals will voluntarily endorse the 12 principles set forth in the Code, thereby helping us make the Eberly College of Science a place where every individual feels respected and valued, as well as challenged and rewarded.

Disability Accommodations

Penn State welcomes students with disabilities into the University's educational programs. Every Penn State campus has an office for students with disabilities. Student Disability Resources (SDR) Web site provides contact information for every Penn State campus: <http://equity.psu.edu/sdr/disability-coordinator>. For further information, please visit Student Disability Resources Web site: <http://equity.psu.edu/sdr>.

In order to receive consideration for reasonable accommodations, you must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: <http://equity.psu.edu/sdr/guidelines>. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with an accommodation letter. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. You must follow this process for every semester that you request accommodations.

Counseling and Psychological Services (CAPS)

Many students at Penn State face personal challenges or have psychological needs that may interfere with their academic progress, social development, or emotional wellbeing. The university offers a variety of confidential services to help you through difficult times, including individual and group counseling, crisis intervention, consultations, online chats, and mental health screenings. These services are provided by staff who welcome all students and embrace a philosophy respectful of clients' cultural and religious backgrounds, and sensitive to differences in race, ability, gender identity and sexual orientation.

Counseling and Psychological Services at University Park (CAPS): +1-814-863-0395

<http://studentaffairs.psu.edu/counseling/>

Penn State Crisis Line (24 hours/7 days/week): +1-877-229-6400

Crisis Text Line (24 hours/7 days/week): Text LIONS to 741741

Educational Equity and Bias Reporting

Penn State takes great pride to foster a diverse and inclusive environment for students, faculty, and staff. Acts of intolerance, discrimination, or harassment due to age, ancestry, color, disability, gender, gender identity, national origin, race, religious belief, sexual orientation, or veteran status are not tolerated and can be reported through Educational Equity via the Report Bias webpage (<http://equity.psu.edu/reportbias/>).

Mandated Reporting (Title IX)

Penn State's policies require faculty to share information about incidents of sex-based discrimination and harassment (discrimination, harassment, sexual harassment, sexual misconduct, dating violence, domestic violence, stalking, and retaliation) with Penn State's Title IX coordinator or deputy coordinators, regardless of whether the incidents are stated in person or shared by students as part of their coursework. For more information regarding the University's policies and procedures for responding to reports of sexual or gender-based harassment or misconduct, please visit <http://titleix.psu.edu>. Additionally, faculty members are required to report on any reasonable suspicion of child abuse in accordance with the Pennsylvania Child Protective Services Law.