

RUTGERS UNIVERSITY  
Criminal Justice Department

Scientific Applications in Justice  
Spring Session 306 - 2011

Prof. Michael Emanuel

This is the second half of a two-term course designed to present to the non-scientific student the techniques, skills and limitations of the modern crime laboratory.

This term 306, the student is introduced to the material not covered in 305 and in addition will be required to submit a research paper on a significant case in the field of Forensic Science.

Once again the course will demonstrate how the scientific, law enforcement and legal communities must work together if a just and logical conclusion is to be reached. The written research paper will involve teamwork, organization and a formal presentation.

Students, as part of the course requirements, are required to read the Star Ledger daily. Important Forensic Cases and new developments appear on a daily basis. You may be tested on this information.

Required Text:

Safferstein, Richard, Criminalistics, an Introduction to Forensic Science  
New Jersey: Prentice-Hall Inc., 1987 (10th Edition)

Note: The text is available at the University Book Store. There will also be several class handouts and students are responsible for all materials contained therein as well.

Suggested Readings:

Lifflander, Mathew L., Final Treatment: The file on Dr. X, New York; W.W. Norton & Co., 1978

Goddard, Kenneth W., Crime Scene Investigation, Virginia; Reston Publishing Co., 1977

Helpem, Milton – Autopsy

Baden, Michael – Unnatural Deaths, Confessions of a Medical Examiner

Course Requirement

|    |                               |     |
|----|-------------------------------|-----|
| 1) | Mid Term Exam                 | 50% |
| 2) | Research Paper & Presentation | 30% |
| 3) | Case Study Exam               | 20% |

SUGGESTED CASE

1. \*DR. X. JASCALAVICH 1976
  2. Coppolino - Late 60's
  3. \*Sam Shepard - Cleveland - Late 50's
  4. Lindberg Kidnapping
  5. J. Kennedy - 1963
  6. Marilyn Monroe
  7. Natalie Wood
  8. Jim Jones
  9. Charles Manson - Sharon Tate - Helter Skelter
  10. Trooper Mescrlian/ Topolesky
  11. \*Kuklinski ( Ice Man )
  12. Zarinsky  
Calandriello - 1975 Trial
  13. \*Trooper Lamonico
  14. Dr. Sugar
  15. Bundy
  16. Marshall/Blind Man
  17. Hall-Mills
  18. Dr. Jeffrey MacDonald/Fatal Vision
  19. O.J. Simpson
- \*Required**

QUESTIONS THAT SHOULD BE ADDRESSED IN YOUR PAPER. ALL SOURCES SHOULD BE FOOTNOTED!

Following questions to be used as a guide:

1. Evidence - Types - Seized properly?
  2. Investigation - Flawed  
Thorough
  3. Was forensic evidence reliable?
  4. Was the case prosecuted properly?
  5. Was the accused defended properly?
  6. Was the Judge biased?
  7. Was there undue publicity - Press - Yellow Journalism?
  8. Was the verdict just?
  9. What were the repercussions from the case?  
How do they relate to society?  
For the people?  
Damaging to the people?  
Legal standpoint?  
Benefits to society?
- A. Case Research Paper must be thorough and properly documented. POINTS WILL BE DEDUCTED IF NOT PROPERLY FOOTNOTED. Cite all sources. Make sure to include a Bibliography.
- B. Oral Presentation must be a minimum of 45 minutes. No more than 60 minutes. Preferably employ entire group - use creativity - visual aids are encouraged - diagrams, slides, video, etc. In the past some groups have done interview formats or dramatic re-enactments, even satiracle presentations are permissible.

Important that assigned group captains make sure that the entire group is involved. If any group member is absent or does not show for meetings, it is imperative that I know early in the project! These projects, oral and written, are not to be done by 2 or 3 people. You will be graded as a group, there is no excuse except documented sickness. Any individual in a group, not participating will be severely penalized by a reduction in final grade as I deem appropriate. Students are required to read the Star Ledger daily. Articles dealing with Forensics will be discussed and the class will be quizzed.

COURSE OUTLINE

- Thurs. 20 Jan. Chapter 1, Introduction, pg. 3-24
- Thurs. 27 Jan. Chapter 2, Crime Scene pg. 38 – Case Selection 27-50
- Thurs. 3 Feb. Chapter 3, Physical Evidence pg. 59-81
- Thurs. 10 Feb. Chapter 4, Glass/Soil Botanical pg. 93-115
- Thurs. 17 Feb. Chapter 17, Firearms/Toolmarks/Impressions, pg. 417-447
- Thurs. 24 Feb. Chapter 14 & 15 Arson/Explosives, pg. 353-386
- Thurs. 3 Mar. Chapter 11, DNA pg. 265-290
- Thurs. 10 Mar. EXAM
- Thurs. 17 Mar. SPRING BREAK
- Thurs. 24 Mar. 1<sup>st</sup> Presentation \_\_\_\_\_  
2<sup>nd</sup> Presentation \_\_\_\_\_
- Thurs. 31 Mar. 3<sup>rd</sup> Presentation \_\_\_\_\_  
4<sup>th</sup> Presentation \_\_\_\_\_
- Thurs. 7 Apr. 5<sup>th</sup> Presentation \_\_\_\_\_  
6<sup>th</sup> Presentation \_\_\_\_\_
- Thurs. 14 Apr. 7<sup>th</sup> Presentation \_\_\_\_\_  
8<sup>th</sup> Presentation \_\_\_\_\_
- Thurs. 21 Apr. 9<sup>th</sup> Presentation \_\_\_\_\_  
10<sup>th</sup> Presentation \_\_\_\_\_
- Thurs. 28 Apr.
- Thurs. 5 May FINAL

**NOTE:** *This outline is subject to change. THE STUDENT REMAINS RESPONSIBLE FOR THE COURSE CONTENT LISTED IN THE OUTLINE.*