

**Biology 3331
Forensic Biology / Part 2**

Spring 2009

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Biol 403-405**

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Recommended Readings:

- (1) Criminalistics, 9th ed. Saferstein
- (2) Selected Required Readings (These will be made available in class, and/or on reserve at the Willis Library, or online)

Course Objectives- This course is the second semester of a two semester survey of the various forensic sciences. Students will have successfully completed CJ 3330 before taking this course. Adequate background in biology and chemistry is necessary for successful completion of Biol. 3331. In this semester the emphasis is upon direct examination of human remains and related biological evidence; e.g. forensic anthropology, pathology, odontology, toxicology, etc. Students will learn how cases arise, i.e. how human remains are located, recovered and processed. Supporting biological, clinical, and physical sciences will be discussed as well, e.g. entomology, DNA science, forensic geology / palynology, and remote sensing as these pertain to remains analysis. **ALL ASSIGNED READING MATERIALS WILL BE COVERED ON EXAMINATIONS WHETHER SPECIFICALLY DISCUSSED IN CLASS OR NOT. IF YOU HAVE QUESTIONS ABOUT THE CONTENT OF AN ASSIGNMENT, IT IS YOUR RESPONSIBILITY TO ASK ABOUT IT IN CLASS.**

Grading – Course grades will be determined by the number of points accumulated on three equipartite examinations, each worth 100 points. Letter grades will be based upon a percent scale as follows: A= 90-100%; B = 80-89%; C = 70-79%...etc. There will be no makeup examinations. All exams will be announced one academic week in advance. Examinations will cover reading assignments, online, and lecture material. Students are liable for material and announcements given in their absence. The instructor reserves the right to revise the syllabus, with appropriate notice, at any time. Unannounced “reading” quizzes may be given from time to time to insure that assignments are current.

ADA – The instructor will make every effort to accommodate students with documented disabilities. Students seeking special assistance should address these matters to the Office of Disabilities Accommodation in the Student Union.

Academic Dishonesty – In general, “academic dishonesty” means the unauthorized giving or receiving of assistance on a graded assignment or examination. See the appropriate university publications for penalties and details.

American English is the language of instruction – This policy is predicated on the assumption that knowledge gained in the course will be deployed in a society whose principal commercial language is English.

| Week of / | Topic |
|------------------|---|
| 01/19 | Forensic science defined / survey of disciplines (no class Monday) |
| 01/26 | Standards for the admissibility of novel scientific evidence / who is an expert and what is science (XXXXXXXXXX) |
| 02/02 | Forensic Pathology I – Who, what, when, where, why / systems / autopsy / common errors |
| 02/09 | Forensic Pathology II – Trauma / common errors and limitations |
| 02/16 | Odontology – Dental identification / Bitemark evidence |
| EXAM 1 | |
| 02/23 | Taphonomy I - Postmortem fate of human remains / estimating the postmortem interval |
| 03/02 | Taphonomy II – Location and recovery of human remains |
| 03/09 | Forensic Anthropology I – Kinds of cases / case progression / biological profile / identification / databasing / metadata |
| 03/16 | Spring Break – No classes |
| 03/23 | Forensic Anthropology II – Trauma / common errors and limitations |
| 03/30 | Forensic Toxicology (31 st is the last day to drop a class with a WP) |
| EXAM II | |
| 04/06 | Blast and Thermal Events / Arson scenes Blast and Thermal Events / Arson scenes |
| 04/13 | DNA as forensic evidence I – Structure and theory |
| 04/20 | DNA as forensic evidence II – sampling, techniques, and databasing |

- 04/27 Forensic Entomology
- 05/04 New Forensic disciplines
- 05/11 Finals Week (EXAM III at time of regularly scheduled final)

Reading Assignments- You will be given reading assignments from a variety of sources. The material covered in these readings will be tested in several formats on regularly scheduled exams. If class discussions indicate that participants are not keeping up, then unannounced 'readings' quizzes may occur. The possible points on these quizzes will add to the total possible points in the course thus changing the basis for the final grade. Therefore, read these assignments as soon as possible so that if you have questions about their content, you can clear them up in class.

In general, one reading of a given assignment will not be adequate. The essence of forensic science is the ability to access, assimilate, and synthesize information from a variety of sources.

Scientia crescat !