Section: 0001: lecture

Credits: 2 credits

Scheduled Time: 0830-1020 Lecture (Thursdays)

Location: BA 126: Lecture

Instructor: Dr. Jack Ballantyne
Office CH 223
Tel: 407 823 0163
e-mail: jack.ballantyne@ucf.edu to schedule appointments.

Office Hours: 1100-1600 Thu

Course Description: This course introduces students to the concepts and procedures of contemporary forensic biochemistry. It forms the foundation for more advanced studies in the area of forensic DNA analysis and population genetics. Emphasis will be placed upon techniques and procedures that are, or have been, used in operational crime laboratories throughout the United States.

Prerequisites: Genetics (PCB 3063) and Immunology (PCB 3233), or equivalent, is required of all students.

Withdrawal Deadline: 29 October 2010

Exams: Mid-term: 04 October 2010
Final: 06 December 2010

Text:
An Introduction to Forensic Genetics, 2nd Edition
William Goodwin, Adrian Linacre, Sibte Hadi
ISBN: 978-0-470-71019-7
Paperback, 216 pages
Decembers 2010
Wiley, Hoboken NJ

Supplemental Text: Readings in the field of forensic serology/biochemistry will be provided as needed.

Attendance Policy: Attendance is expected since exam topics will originate from class discussions.

Grading: Grades for the lecture class will be based upon two in-class examinations (each accounting for 50% of the final grade). Grading scale: A: 91-100, B: 81-90, C: 65-80, D: 51-64, F: ≤50. See separate syllabus for full details of the laboratory portion of the course.

Additional Policies: Students who are not officially registered in the class will not have exams graded or returned.

Academic Integrity/Plagiarism:
Plagiarism and Cheating of any kind on an examination, quiz, or assignment will lead to an "F" for the entire course and may be subject to appropriate referral to the Office of Student Conduct for further action. See the UCF Golden Rule for further information. I will assume for this course that you will adhere to the academic creed of the University and will maintain the highest standards of academic integrity. In other words, don't cheat by giving answers to others or taking them from anyone else. I will also adhere to the highest standards of academic integrity, so please do not ask me to change (or expect me to change) your grade illegitimately or to bend or break rules for one person that will not apply to everyone.

Academic Calendar: See
http://www.registrar.sdes.ucf.edu/calendar/academic/2012/fall

Syllabus
23 August  1. Introduction to forensic genetics
30 August  2. DNA structure and the genome
06 September 3. Biological material collection, characterization and storage
13 September 4. DNA extraction and quantification.
20 September 5. Polymerase chain reaction.
04 October Mid Term (lectures 1-6)
11 October 7. Assessment of STR profiles.
18 October 8. Statistical interpretation of STR profiles.
01 November 10. Databases of DNA profiles.
08 November 11. Kinship testing.
22 November Thanksgiving
29 November 13. Lineage markers.
06 December Final Examination.