Forensic Laboratory Quality Assurance

CHS 4537, Fall 2012

Instructor:
Mattheu L. Miller - Chm. Rm. 330, Office hours and 10:00 - 12:00 Tuesday and Thursday.

Prerequisites:
Prerequisites for this course are a 'C' grade or better in the following courses, or consent of the instructor.

CHS 3505C – Forensic Microscopy
CHS 3501 – Introduction to Forensic Science
CHS 3533C – Forensic Biochemistry I

Class Meetings:
Lecture – Tue. 4:30 – 6:15 in MAP 306

Course Description:
This course will cover the concepts and principles of quality assurance and quality systems management in forensic laboratories. Topics include the development of quality systems and quality
assurance manuals, analytical methods development and control charting, sample selection, accreditation and international standards.

**Recommended Text:**

This course is delivered with WebCourses assistance/Hybrid. All students will have access to a significant amount of information regarding the course through WebCourses. A text is not required for this course. Approximately 40% of the course will be delivered online.

For the student who wishes to have a text to reinforce the information in the course, the following text is recommended: Quality Assurance Principles for Analytical Laboratories, 3rd Edition by F. M. Garfield, E. Klesta and J. Hirsch, AOAC International. The text can be purchased online.

In addition, students will be expected to access UCF library and internet resources throughout the course. Furthermore, students are required to check webcourse once per day to determine assignments and physical meeting times.

**Assessment:**

Course assessment will be based on three written exams, a comprehensive final exam and self tests and participation points. Point assignment is as follows:

- Three written examinations (150 pts each) 450 pts
- Comprehensive Final Examination (online) 250 pts
- Online Homework/discussions 200
- Self tests and participation (online) 100 pts

**Total** 1000 pts
Grading Scale:

90 – 100% A
80 – 89%  B
70 – 79%  C
60 – 69%  D
<60%    F

General Course Policies:

Cheating offenses will be dealt with by the most severe penalty allowed. Do not be disruptive during the lecture; turn off your cell phones or put them in vibrate mode. Students are encouraged to ask questions and participate in class discussions; however, disruptive non-participatory talk will not be tolerated. Disruptive individuals will be dismissed from the class. Audio taping of lectures is not permitted.

In the case of an excused absence on an exam day, your final exam grade will also count for the missed exam grade. Absences due to illness require a note from your doctor if you want to make up missed assignments or exam.

As stated above, a significant amount of course materials will be made available on WebCourses. If you are registered for this course, you can access the materials via the WebCourses or MyUCF login. If you encounter any computer problems or problems with WebCourses access, you must contact the UCF Help Desk.

The instructor reserves the right to modify the course content or policies at any time.
Lecture Dates and Topics:

Aug.  21  Qualifications for a Career in Forensic Science & Quality Assurance Overview (Module 1)
       28  The Quality Assurance Manual (Module 2) (online)
Sept.  4  Statistical Applications and Control Charts (Module 3)
       11  Personnel Considerations (Module 4); (online)
       18  Exam 1 (two hour exam)
       25  Laboratory Design (second hour, Module 5)
Oct.  2  Management of Equipment and Supplies (Module 6) (online)
       09  Sampling (Module 7) Records (Module 8)
       16  Exam 2 (first hour); Ethics in the Forensic Laboratory (second hour)
       23  Methods and Analyses (Module 9); (online)
       30  Proficiency Testing (Module 10)
Nov.  6  Audit Procedures (Module 11) (online)
       13  Exam 3
       20  Reading Assignment Discussion (online)
       27  Laboratory Accreditation (Module 12), ISO 17025
Dec.  5-10 Final Exam as scheduled in Final Exam Period