

For approval of new courses and deletions or modifications to an existing course.

registrar.gmu.edu/facultystaff/curriculum

Action Requested: X Create new course Modify existing course (check a Title Credits Prereq/coreq Sched Other:		Grade Type	<b>Durse Level:</b> Undergraduate Graduate	
College/School:College of SciSubmitted by:William Whild			Cience Program Email: wwhildin@gmu.edu	
	lumber: 512 E	Effective Term: Fall X Spring Summe	Year 2011	
	vestigation - Laboratory			
Banner (30 characters max in New				
Credits:       X       Fixed       1       or       Repeat Status:       X       Not Repeatable (NR)         (check one)       Variable       to       (check one)       Repeatable within degree (RD)       Maximum credits       1         Repeatable within term (RT)       allowed:       1				
Grade Mode: X Regular (A, B, (check one) Satisfactory/No Special (A, B C	Credit Type Code(s	s): Lecture (LEC) X Lab (LAB) Recitation (RCT) Internship (INT)	Independent Study (IND) Seminar (SEM) Studio (STU)	
Prerequisite(s): FRSC – 510 or permission of inst Special Instructions: (list restrictions)		ard-coding; etc.)	Instructional Mode: X 100% face-to-face Hybrid: ≤ 50% electronically delivered 100% electronically delivered Are there equivalent course(s)?	
			Yes X No If yes, please list	
Catalog Copy for NEW Co	ourses Only (Consult Univer	rsity Catalog for models)		
Description (No more than 60 words			List additional information for the course)	
This is a series of practical laboratory exercises that introduces the student to sophisticated crime scene documentation techniques including collection of evidence, examination of hairs, fibers, toolmarks and other trace evidence. Advanced topics in blood spatter, trajectory, pattern casting, and alternate light sources will be explored.				
Indicate number of contact hours: When Offered: (check all that apply)	Hours of Lecture or Ser	ninar per week:	Hours of Lab or Studio: 3	
		<u> </u>		
Approval Signatures				
Department Approval	Date	College/School Approval	Date	
If this course includes subject matter currently dealt with by any other units, the originating department must circulate this proposal for review by those units and obtain the necessary signatures prior to submission. Failure to do so will delay action on this proposal.				
Unit Name	signatures prior to submission. Fai	Unit Approver's Signature		
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# For Graduate Courses Only

Graduate Council Member	Provost Office	Graduate Council Approval Date
For Registrar Office's Use Only: Banner	_Catalog	revised 2/2/10

# Course Proposal Submitted to the Graduate Council by The College of Science

# 1. <u>COURSE NUMBER AND TITLE</u>: FRSC 512: Crime Scene Investigation Laboratory

## Course Prerequisites: FRSC-510 or permission of instructor

### Catalog Description: (1:0:3)

This is a series of practical laboratory exercises that introduces the student to sophisticated crime scene documentation techniques including collection of evidence, examination of hairs, fibers, toolmarks and other trace evidence. Advanced topics in blood spatter, trajectory, pattern casting, and alternate light sources will be explored.

## 2. <u>COURSE JUSTIFICATION</u>: No other course available.

### Course Objectives:

Crime Scene Investigation Laboratory course is designed to build on aspects taught in the Basic Crime Scene Analysis course, (FRSC 510), and to provide an enhanced foundation in the field of criminalistics for those students who are interested in learning the application of science to solving crime. The objectives will be to introduce students to techniques in collection of evidence, examination of hairs, fibers and other trace evidence through laboratory and field exercises.

### **Course Necessity:**

There is a shortage of available courses from which Forensic Science graduates can choose beyond the core at the 500-level. This is no lab course for students in the Forensic Science Program that allows them to have hands on experiences and to develop techniques in the analysis of processing evidence.

### **Course Relationship to Existing Programs:**

This will be an elective within the Forensic Science Master's program

Course Relationship to Existing Courses: None

### 3. <u>APPROVAL HISTORY</u>: N/A

## 4. <u>SCHEDULING AND PROPOSED INSTRUCTORS</u>:

Semester of Initial Offering: Spring 2011

**Proposed Instructors: Emily Rancourt** 

### 5. <u>TENTATIVE SYLLABUS</u>: See attached.

Syllabus:

Instructors:	Emily Rancourt
	GMU – Assistant Professor
	COS – Forensic Science Program

Texts: Forensic Science Laboratory Manual and Workbook 3<sup>rd</sup> edition, by Thomas Kubic & Nicholas Petraco

#### Course Description:

The objectives will be to introduce students to techniques, procedures, and physical methods of forensic science through laboratory and field exercises.

#### Lecture Content:

- 1. Check in, lab safety Introduction to Scientific Measurement
- 2. Understanding elements of identification & individualization
- 3. Use of compound microscopes
- 4. Stereomicroscopes and firing pin/tool mark impressions
- 5. Acquiring and classifying inked and latent fingerprints
- 6. Trace evidence collection and sorting
- 7. Midterm
- 8. Examination of human hair
- 9. Examination of mammalian hair
- 10. Examination of trace quantities of synthetic fibers
- 11. Tool mark examination
- 12. Soil examination
- 13. Glass Fractures and direction of force
- 14. Final Examination

Grades: 30% Midterm, 30% Final, 40 % Laboratory Exercises

#### GMU Honor Code:

Standards of academic integrity as set forth by the University are strictly observed and rigorously enforced in this class. The complete Honor Code is as follows: *To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of the George Mason University community and with the desire for greater academic and personal achievement, we, the student members of the university community, have set forth this honor code:* Student members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work.

### GMU Email:

Each student is responsible for activating their GMU email account and checking their account on a regular basis for University and class announcements.

### **GMU Police Policy:**

If you are currently employed with a law enforcement agency as a sworn officer and would like to carry a firearm on campus and into class, you must contact GMU Police Department as a courtesy. 703-993-2810