

# Course Approval Form

For instructions:  
<http://registrar.gmu.edu/facultystaff/catalog-revisions/course/>

**Action Requested:** (definitions available at website above)

- Create NEW  Inactivate  
 Modify (check all that apply below)

**Course Level:**

- Undergraduate  Graduate

- Title (must be 75% similar to original)  Repeat Status  
 Credits  Schedule Type

- Prereq/coreq  Grade Mode  
 Restrictions  Other: Description \_\_\_\_\_

College/School:  Department:   
Submitted by:  Ext:  Email:

Subject Code:  Number:   
(Do not list multiple codes or numbers. Each course proposal must have a separate form.)

Effective Term:  Fall  Spring  Summer  
Year

Title: Current   
Banner (30 characters max w/ spaces)   
New

**Fulfills Mason Core Req?** (undergrad only)

- Currently fulfills requirement  
 Submission in progress

Credits:  Fixed →  to   
 Variable →  to   
 Lec + Lab/Rct →  or

Repeat Status: (check one)  Not Repeatable (NR)  
 Repeatable within degree (RD) → Max credits allowed:   
 Repeatable within term (RT) → (required for RT/RD status only)

Grade Mode: (check one)  Regular (A, B, C, etc.)  
 Satisfactory/No Credit  
 Special (A, B, C, etc. +IP)

Schedule Type: (check one)  Lecture (LEC)  Independent Study (IND)  
 Lab (LAB)  Seminar (SEM)  
 Recitation (RCT)  Studio (STU)  
 Internship (INT)  
LEC can include LAB or RCT if linked sections will be offered

**Prerequisite(s)** (NOTE: hard-coding requires separate Prereq Checking form; see above website):

**Corequisite(s):**

**Restrictions Enforced by System:** Major, College, Degree, Program, etc. Include Code(s).

**Equivalencies** (check only as applicable):

- YES, course is 100% equivalent to \_\_\_\_\_  
 YES, course renumbered to or replaces \_\_\_\_\_

**Catalog Copy** (Consult University Catalog for models)

| Description (No more than 60 words, use verb phrases and present tense)   | Notes (List additional information for the course) |
|---|--|
| This course will provide an understanding of body fluid identification and molecular biology testing methodologies as applied to the analysis of forensic samples. The process of forensic DNA analysis will be covered in depth. Current topics in forensic DNA analysis will be reviewed including population genetics, validation, quality assurance, the CODIS database, Y-STRs, mitochondrial DNA testing, SNPs and contemporary research. |  |
| Indicate number of contact hours: _____ Hours of Lecture or Seminar per week: _____ Hours of Lab or Studio: _____   |  |
| When Offered: (check all that apply) <input checked="" type="checkbox"/> Fall <input type="checkbox"/> Summer <input checked="" type="checkbox"/> Spring  |  |

**Approval Signatures**

College/School Approval  Date

By any other units, the originating department must circulate this proposal for review by \_\_\_\_\_  
Failure to do so will delay action on this proposal.

| Unit Approver's Signature         | Date                              |
|-----------------------------------|-----------------------------------|
| <input type="text" value="____"/> | <input type="text" value="____"/> |
| <input type="text" value="____"/> | <input type="text" value="____"/> |

**Graduate Council Approval**

\_\_\_\_\_  
UGC or GC Council Member

\_\_\_\_\_  
Provost's Office

\_\_\_\_\_  
UGC or GC Approval Date

## Course Proposal Submitted to the College of Science Curriculum Committee (COSCC)

The form above is processed by the Office of the University Registrar. This second page is for the COSCC's reference. Please complete the applicable portions of this page to clearly communicate what the form above is requesting.

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### **FOR ALL COURSES** (required)

Course Number and Title: FRSC 460- Forensic Molecular Biology

Date of Departmental Approval: September 8<sup>th</sup> 2016

### **FOR MODIFIED COURSES** (required if modifying a course)

- Summary of the Modification: The course title, description, and pre-requisites have been modified.
- Text before Modification (title, repeat status, catalog description, etc.):  
FRSC 460 - Forensic DNA Sciences  
Credits: 3  
Not Repeatable for Credit  
Offered by Forensic Science Program  
Presentation of the general principles and methodologies used in forensic DNA profiling. Topics include the development of DNA profiling methods, current DNA typing techniques, forensic DNA and paternity-related issues, and legal issues associated with quality control, frequency estimates, sample conditions, chain of custody, and admissibility.  
Prerequisite(s): Completion of forensic science foundation courses
- Text after Modification (title, repeat status, catalog description, etc.):  
FRSC 460- Forensic Molecular Biology  
Credits: 3  
Not Repeatable for Credit  
Offered by Forensic Science Program  
This course will provide an understanding of body fluid identification and molecular biology testing methodologies as applied to the analysis of forensic samples. The process of forensic DNA analysis will be covered in depth. Current topics in forensic DNA analysis will be reviewed including population genetics, validation, quality assurance, the CODIS database, Y-STRs, mitochondrial DNA testing, SNPs and contemporary research.  
Pre-requisites: FRSC 200, FRSC 201, BIOL 213, and BIOL 311 (hard-coded)
- Reason for the Modification: The course title and description have been modified to more accurately describe the course curriculum and to comply with Forensic Science Education Programs Accreditation Commission (FEPAC) accreditation standards. The pre-requisites have also been modified to include specific coursework that is required instead of the original generic wording of "completion of forensic science foundation courses" which lacked biology coursework.