# Course Change Request

Date Submitted: 01/23/26 2:05 pm

## Viewing: **FRSC 470 : Forensic Genomics**

Last approved: 01/14/25 6:09 am

Last edit: 01/23/26 2:05 pm

Changes proposed by: kcarisi

**Catalog Pages referencing this course**

Forensic Science (FRSC)

Forensic Science Program

**Select modification type:**

Substantial

### In Workflow

1. **FRSC Representative**
2. **SC Curriculum Committee**
3. SC Assistant Dean
4. Assoc Provost-Undergraduate
5. Registrar-Courses
6. Banner

### Approval Path

1. 01/23/26 2:07 pm Kimberly Rule (kcarisi): Approved for FRSC Representative

### History

1. Jan 28, 2021 by Kimberly Rule (kcarisi)
2. Jan 14, 2025 by Kimberly Rule (kcarisi)

**Are you completing this form on someone else's behalf?**

No

**Effective Term:** Fall 2026

**Subject Code:** FRSC - Forensic Science **Course Number:** 470

**Bundled Courses:**

**Is this course replacing another course?** No

**Equivalent Courses:**

**Catalog Title:** Forensic Genomics

**Banner Title:** Forensic Genomics

**Will section titles vary by semester?** No

**Credits:** 4

**Schedule Type:** Lecture

**Hours of Lecture or Seminar per week:** 4

**Repeatable:** May be only taken once for credit, limited to 3 attempts (N3)

**Max Allowable Credits:** 12

**Default Grade Mode:** Undergraduate Regular

**Recommended Prerequisite(s):**

**Recommended Corequisite(s):**

**Required Prerequisite(s) / Corequisite(s) (Updates only):**

Add as required pre-requisites: BIOL 215 and BIOL 313 ~~BIOL 213, BIOL 214 or STAT 250, BIOL 311 or BIOL L311, and FRSC 460~~

**Registrar's Office Use Only - Required Prerequisite(s)/Corequisite(s):**

| And/Or | ( | Course/Test Code | Min Grade/Score | Academic Level | ) | Concurrency? |
|---|---|---|---|---|---|---|
| | ( | BIOL 213 | C | UG | | |
| Or | | BIOL 213 | XS | UG | ) | |
| And | ( | BIOL 214 | C | UG | | |
| Or | | BIOL 214 | XS | UG | | |
| Or | | STAT 250 | C | UG | | |
| Or | | STAT 250 | XS | UG | ) | |

| And/Or | ( | Course/Test Code | Min Grade/Score | Academic Level | ) | Concurrency? |
|---|---|---|---|---|---|---|
| And | ( | BIOL 311 | C | UG | | |
| Or | | BIOL 311 | XS | UG | | |
| Or | | BIOL L311 | T | UG | ) | |
| And | ( | FRSC 460 | C | UG | | |
| Or | | FRSC 460 | XS | UG | ) | |

**Registration Restrictions (Updates only):**

**Registrar's Office Use Only - Registration Restrictions:**

**Field(s) of Study:**

**Class(es):**

**Level(s):**

**Degree(s):**

**School(s):**

**Catalog Description:**

This course will cover advanced principles and methods related to DNA typing in a forensic context. The course will review the current applications of DNA typing, and then address emerging methods and technological advances. The focus of the course will be on methods and techniques involved in Investigative Genetic Genealogy. A second focus of the course will be on how to properly interpret these data. Particular emphasis will be placed on how these emerging methods can advance the field of forensic DNA typing and lead to new capabilities in human identification. Students will gain an understanding of the capabilities and limitations of these emerging areas within forensic science, covering how they build on current practices. Data review and analysis from forensic DNA results will be included in the course.

**Justification:**

What: add BIOL 215 lab and BIOL 313 lab as required pre-requisites.

Why: BIOL 213 lecture and lab has been recently decoupled to BIOL 213 lecture and BIOL 215 lab, therefore we need to add the BIOL 215 lab as a required pre-requisite to maintain current requisites. BIOL 311 lecture and lab has been recently decoupled to BIOL 311 lecture and BIOL 313 lab, therefore we need to add the BIOL 313 lab as a required pre-requisite to maintain current requisites.

**Does this course cover material which crosses into another department?** No

**Learning Outcomes:**

Students will understand how forensic DNA typing is conducted, including strengths and limitations.
Students will be able to explain current interpretational issues.
Students will be able to understand and interpret genetic genealogy data and cases.
Students will be able to identify future trends in this rapidly advancing field.
Students will be able to address how these emerging methods can advance the field of forensic DNA typing and lead to new capabilities in human identification.

**Will this course be scheduled as a cross-level cross listed section?**

**Attach Syllabus**
FRSC 470-670 Forensic Genomics Syllabus.pdf

**Additional Attachments**

**Specialized Course Categories:**

**Have you reached out to the Libraries to determine whether there are adequate resources to support your course? If not, please email Meg Meiman, Associate University Librarian for Learning, Research, and Engagement at mmeiman2@gmu.edu.**

**Additional Comments:**

**Reviewer Comments**

Key: 17043