Program Change Request

Date Submitted: 03/13/25 9:31 am

Viewing: SC-BS-FRSC : Forensic Science, BS

Last approved: 01/13/25 3:41 pm

Last edit: 03/14/25 3:34 pm

Changes proposed by: jbazaz

Catalog Pages Using this Program

Forensic Science, BS

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

Yes

Requestor:

In Workflow

1. **FRSC Chair**
2. **SC Curriculum Committee**
3. SC Assistant Dean
4. Assoc Provost-Undergraduate
5. Registrar-Programs

Approval Path

1. 03/14/25 3:34 pm Kimberly Rule (kcarisi): Approved for FRSC Chair

History

1. Nov 1, 2017 by clmig-jwehrheim
2. Dec 7, 2018 by Jennifer Bazaz Gettys (jbazaz)
3. Dec 5, 2019 by Jennifer Bazaz Gettys (jbazaz)
4. Mar 26, 2020 by Tory Sarro (vsarro)
5. Jan 29, 2021 by Jennifer Bazaz Gettys (jbazaz)
6. Apr 13, 2021 by Tory Sarro (vsarro)
7. Apr 13, 2021 by Tory Sarro (vsarro)
8. Apr 13, 2021 by Tory Sarro (vsarro)

9. May 12, 2022 by Tory Sarro (vsarro)
10. May 25, 2022 by Tory Sarro (vsarro)
11. Apr 4, 2023 by Jennifer Bazaz Gettys (jbazaz)
12. Mar 14, 2024 by Jennifer Bazaz Gettys (jbazaz)
13. May 30, 2024 by Tory Sarro (vsarro)
14. Jan 13, 2025 by Kimberly Rule (kcarisi)

Name	Extension	Email
Kimberly Rule	5302	kcarisi

Effective Catalog: 2025-2026

Program Level: Undergraduate

Program Type: Bachelor's

Degree Type: Bachelor of Science

Title: Forensic Science, BS

Banner Title: Forensic Science, BS

Registrar/OAPI Use Only – SCHEV Status Approved

Registrar's Office Use Only – Program Start Term

Registrar/OAPI Use Only – SCHEV Letter

Registrar/OAPI Use Only – SACSCOC Status

Concentration(s):

	Associated Concentrations	Registrar's Office Use Only: Concentration Code
1	Criminalistics	FRCR
2	Forensic Biology	FRBL
3	Forensic Chemistry	FRCH
4	Interdisciplinary Forensic Science	FRIN

Registrar/IRR Use Only – Concentration CIP Code

College/School: College of Science

Department / Academic Unit: Forensic Science Program

Jointly Owned Program? No

Justification

What: Updating the Writing Intensive (WI) course.

Why: We've made adjustments such that the department now only has one WI course.

What: Making retroactive a WI change that took place in March 2024.

Why: To assist degree audits.

Total Credits Required: Total credits: minimum 120

Registrar's Office Use Only - Program Code:

SC-BS-FRSC

Registrar/IRR Use Only – Program CIP Code

Admission Requirements:

Admissions

University-wide admissions policies can be found in the Undergraduate Admissions Policies section of this catalog. To apply for this program, please complete the George Mason University Admissions Application.

Program-Specific Policies:

Policies

Students must fulfill all Requirements for Bachelor's Degrees, including the Mason Core.
FRSC 302 Forensic Trace Analysis (Mason Core) ~~or FRSC 304 Forensic Chemistry~~ will satisfy the writing intensive requirement.
For policies governing all undergraduate programs, see AP.5 Undergraduate Policies.

Degree Requirements:

Students should refer to the Admissions & Policies tab for specific policies related to this program.
Students must complete the core courses, select one concentration, and complete Mason Core and Elective Credits.
All major coursework must be completed with a minimum GPA of 2.30. No more than three courses with a grade of 'D' (1.00) may be applied to the major.
Students are advised to be aware of any prerequisites that may be required for each course in the curriculum.
Students are only permitted three attempts for all major courses; following a third unsuccessful attempt the student will no longer be able to pursue the major.

Core Courses

Students in each concentration must complete the following courses:

Forensic Science Core Courses		
FRSC 200	Survey of Forensic Science	3
FRSC 201	Introduction to Criminalistics	3
FRSC 302	Forensic Trace Analysis (Mason Core) [1]	3
CRIM 100	Introduction to Criminal Justice (Mason Core)	3
Natural Science Core Courses		
BIOL 213	Cell Structure and Function	4
BIOL 214	Biostatistics for Biology Majors	3-4
or STAT 250	Introductory Statistics I (Mason Core)	

BIOL 311	General Genetics	4
CHEM 211 & CHEM 213	General Chemistry I (Mason Core) and General Chemistry Laboratory I (Mason Core)	4
CHEM 212 & CHEM 214	General Chemistry II (Mason Core) and General Chemistry Laboratory II (Mason Core)	4
CHEM 313 & CHEM 315	Organic Chemistry I and Organic Chemistry Lab I	5
CHEM 314 & CHEM 318	Organic Chemistry II and Organic Chemistry Lab II	5
MATH 113	Analytic Geometry and Calculus I (Mason Core)	4-6
or MATH 123 & MATH 124	Calculus with Algebra/Trigonometry, Part A and Calculus with Algebra/Trigonometry, Part B (Mason Core)	
PHYS 243 & PHYS 244	College Physics I (Mason Core) and College Physics I Lab (Mason Core) [2]	4
PHYS 245 & PHYS 246	College Physics II (Mason Core) and College Physics II Lab (Mason Core) [2]	4
Total Credits		53-56

[1] FRSC 302 will satisfy this major's writing-intensive requirement.

[2]
- Students in the Forensic Chemistry Concentration may instead choose the following physics sequence: PHYS 160 University Physics I (Mason Core) & PHYS 161 University Physics I Laboratory (Mason Core) & PHYS 260 University Physics II (Mason Core) & PHYS 261 University Physics II Laboratory (Mason Core).
- Please note that PHYS 260 University Physics II (Mason Core) & PHYS 261 University Physics II Laboratory (Mason Core) require a prerequisite of MATH 213 Analytic Geometry and Calculus III.

Concentration in Criminalistics (FRCR)

Forensic Science Extended Core		
FRSC 303	Forensic Evidence and Ethics	3
FRSC 304 & FRSC 305	Forensic Chemistry and Forensic Chemistry Laboratory	4
FRSC 401	Crime Scene Investigations	3
FRSC 405	Independent Research Methods	3
or FRSC 406	Forensic Internship	

FRSC 460 & FRSC 461	Forensic DNA Analysis and Forensic DNA Analysis Laboratory	4
Required Concentration Courses		
Select two lecture and laboratory pairings for a minimum of 8 credits:		8-12
FRSC 325 & FRSC 326	Molecular Biology and Molecular Biology Laboratory	
BIOL 305 & BIOL 306	Biology of Microorganisms and Biology of Microorganisms Laboratory	
BIOL 405	Microbial Genetics	
BIOL 407	Microbial Diversity	
BIOL 430	Advanced Human Anatomy and Physiology I	
BIOL 431	Advanced Human Anatomy and Physiology II	
BIOL 452 & BIOL 453	Immunology and Immunology Laboratory	
BIOL 465	Histology	
BIOL 483	General Biochemistry	
or CHEM 463 & CHEM 465	General Biochemistry I and Biochemistry Lab (Mason Core)	
BIOL 484 & BIOL 485	Cell Signaling and Disease and Cell Signaling Laboratory	
CHEM 321	Quantitative Chemical Analysis	
CHEM 331 & CHEM 336	Physical Chemistry I and Physical Chemistry Lab I (Mason Core)	
Supporting Science Electives		
Select a minimum of 7 credits (not previously taken) from the following:		7-10
FRSC 325	Molecular Biology	
FRSC 326	Molecular Biology Laboratory	
FRSC 404	Advanced Instrumentation in Forensic Chemistry	
FRSC 450	Practical Forensic Skeletal Biology	
FRSC 470	Forensic Genomics	
BINF 401	Bioinformatics and Computational Biology I	

BINF 402	Bioinformatics and Computational Biology II
BIOL 305	Biology of Microorganisms
BIOL 306	Biology of Microorganisms Laboratory
BIOL 382	Introduction to Virology
BIOL 385	Biotechnology and Genetic Engineering
BIOL 401	Phage Discovery
BIOL 404	Medical Microbiology
BIOL 405	Microbial Genetics
BIOL 407	Microbial Diversity
BIOL 411	Advanced General Genetics
BIOL 412	Phage Genomics
BIOL 417	Selected Topics in Molecular and Cellular Biology (when the topic is "Illumina Sequencing")
BIOL 421	Genetics of Human Diseases
BIOL 430	Advanced Human Anatomy and Physiology I
BIOL 431	Advanced Human Anatomy and Physiology II
BIOL 452	Immunology
BIOL 453	Immunology Laboratory
BIOL 460	Infectious Diseases Wildlife
or EVPP 460	Infectious Diseases of Wildlife
BIOL 465	Histology
BIOL 482	Introduction to Molecular Genetics
BIOL 483	General Biochemistry
BIOL 484	Cell Signaling and Disease
BIOL 485	Cell Signaling Laboratory
BIOL 486	Molecular Biology and Biotechnology Laboratory
CHEM 321	Quantitative Chemical Analysis
CHEM 331	Physical Chemistry I
CHEM 336	Physical Chemistry Lab I (Mason Core)

CHEM 427	Aquatic Environmental Chemistry	
CHEM 446	Bioinorganic Chemistry	
CHEM 463	General Biochemistry I	
CHEM 464	General Biochemistry II	
CHEM 465	Biochemistry Lab (Mason Core)	
Total Credits		32-39

[1]~~FRSC 304%7C will satisfy this major's writing-intensive requirement.~~

Concentration in Forensic Biology (FRBL)

Forensic Science Extended Core		
FRSC 303	Forensic Evidence and Ethics	3
FRSC 304 & FRSC 305	Forensic Chemistry and Forensic Chemistry Laboratory	4
FRSC 401	Crime Scene Investigations	3
FRSC 405	Independent Research Methods	3
or FRSC 406	Forensic Internship	
FRSC 460 & FRSC 461	Forensic DNA Analysis and Forensic DNA Analysis Laboratory	4
Required Concentration Courses		
FRSC 325 & FRSC 326	Molecular Biology and Molecular Biology Laboratory	4
FRSC 470	Forensic Genomics	4
BIOL 483	General Biochemistry	4
Supporting Science Courses		
Select a minimum of 3 credits from the following courses:		3-6
FRSC 450	Practical Forensic Skeletal Biology	
BINF 401	Bioinformatics and Computational Biology I	
BINF 402	Bioinformatics and Computational Biology II	
BIOL 305	Biology of Microorganisms	

BIOL 306	Biology of Microorganisms Laboratory	
BIOL 382	Introduction to Virology	
BIOL 385	Biotechnology and Genetic Engineering	
BIOL 401	Phage Discovery	
BIOL 404	Medical Microbiology	
BIOL 405	Microbial Genetics	
BIOL 407	Microbial Diversity	
BIOL 411	Advanced General Genetics	
BIOL 412	Phage Genomics	
BIOL 417	Selected Topics in Molecular and Cellular Biology (when the topic is "Illumina Sequencing")	
BIOL 421	Genetics of Human Diseases	
BIOL 430	Advanced Human Anatomy and Physiology I	
BIOL 431	Advanced Human Anatomy and Physiology II	
BIOL 452	Immunology	
BIOL 453	Immunology Laboratory	
BIOL 460	Infectious Diseases Wildlife	
or EVPP 460	Infectious Diseases of Wildlife	
BIOL 465	Histology	
BIOL 482	Introduction to Molecular Genetics	
BIOL 484	Cell Signaling and Disease	
BIOL 485	Cell Signaling Laboratory	
BIOL 486	Molecular Biology and Biotechnology Laboratory	
Total Credits		32-35

[1] ~~FRSC 304%7C will satisfy this major's writing-intensive requirement.~~

Concentration in Forensic Chemistry (FRCH)

Extended Forensic Science Core		
FRSC 303	Forensic Evidence and Ethics	3

FRSC 304 & FRSC 305	Forensic Chemistry and Forensic Chemistry Laboratory	4
FRSC 401	Crime Scene Investigations	3
FRSC 405	Independent Research Methods	3
or FRSC 406	Forensic Internship	
FRSC 460 & FRSC 461	Forensic DNA Analysis and Forensic DNA Analysis Laboratory	4
Required Concentration Courses		
FRSC 404	Advanced Instrumentation in Forensic Chemistry	4
CHEM 321	Quantitative Chemical Analysis	4
MATH 114	Analytic Geometry and Calculus II	4
Supporting Science Courses		
Select a minimum of 7 credits from the following courses:		7-10
CHEM 331	Physical Chemistry I	
CHEM 336	Physical Chemistry Lab I (Mason Core)	
CHEM 332	Physical Chemistry II [1]	
CHEM 337	Physical Chemistry Lab II	
CHEM 422	Instrumental Methods of Chemical Analysis [1]	
CHEM 423	Instrumental Methods of Chemical Analysis Laboratory	
CHEM 424	Principles of Chemical Separation [1]	
CHEM 427	Aquatic Environmental Chemistry	
CHEM 441	Properties and Bonding of Inorganic Compounds [1]	
CHEM 446	Bioinorganic Chemistry	
CHEM 463	General Biochemistry I	
CHEM 464	General Biochemistry II	
CHEM 465	Biochemistry Lab (Mason Core)	
Total Credits		36-39

1 These course selections recommend the University Physics sequence: PHYS 160 University Physics I (Mason Core), PHYS 161 University Physics I Laboratory (Mason Core), PHYS 260 University Physics II (Mason Core), PHYS 261 University Physics II Laboratory (Mason Core)

2

~~These course selections recommend the University Physics sequence: PHYS 160 University Physics I (Mason Core), PHYS 161 University Physics I Laboratory (Mason Core), PHYS 260 University Physics II (Mason Core), PHYS 261 University Physics II Laboratory (Mason Core)~~

Concentration in Interdisciplinary Forensic Science (FRIN)

Extended Forensic Science Core		
Select 6 credits (not previously taken) of any 300-400 level FRSC courses		6
Interdisciplinary Courses or Minor		
Select one option from the following:		
Option One: Interdisciplinary Coursework		
Select 15 credits (not previously taken) from the following courses:		15
Any 300-400 level FRSC courses		
BINF 401	Bioinformatics and Computational Biology I	
BINF 402	Bioinformatics and Computational Biology II	
BIOL 305	Biology of Microorganisms	
BIOL 306	Biology of Microorganisms Laboratory	
BIOL 382	Introduction to Virology	
BIOL 385	Biotechnology and Genetic Engineering	
BIOL 401	Phage Discovery	
BIOL 404	Medical Microbiology	
BIOL 405	Microbial Genetics	
BIOL 407	Microbial Diversity	
BIOL 412	Phage Genomics	
BIOL 411	Advanced General Genetics	
BIOL 417	Selected Topics in Molecular and Cellular Biology (when the topic is "Illumina Sequencing")	
BIOL 421	Genetics of Human Diseases	
BIOL 430	Advanced Human Anatomy and Physiology I	
BIOL 431	Advanced Human Anatomy and Physiology II	
BIOL 452	Immunology	

BIOL 453	Immunology Laboratory	
BIOL 460	Infectious Diseases Wildlife	
or EVPP 460	Infectious Diseases of Wildlife	
BIOL 465	Histology	
BIOL 482	Introduction to Molecular Genetics	
BIOL 483	General Biochemistry	
BIOL 484	Cell Signaling and Disease	
BIOL 485	Cell Signaling Laboratory	
BIOL 486	Molecular Biology and Biotechnology Laboratory	
CHEM 321	Quantitative Chemical Analysis	
CHEM 331	Physical Chemistry I	
CHEM 336	Physical Chemistry Lab I (Mason Core)	
CHEM 427	Aquatic Environmental Chemistry	
CHEM 446	Bioinorganic Chemistry	
CHEM 463	General Biochemistry I	
CHEM 464	General Biochemistry II	
CHEM 465	Biochemistry Lab (Mason Core)	
Option Two: Complementary Minor		
Select one minor from the following:		8-15
Any minor offered by the College of Science		
Anthropology Minor		
Bioengineering Minor		
Computer Science Minor		
Data Analysis Minor		
Criminology, Law, and Society Minor		
Forensic Psychology Minor		
Information Technology Minor		
Intelligence Studies Minor		
International Security Minor		

Legal Studies Minor	
Photography Minor	
Psychology Minor	
Statistics Minor	
Total Credits:	**14-21**

Retroactive Requirements Updates:

Catalog Years 2023-2024; 2022-2023; 2021-2022; 2020-2021; 2019-2020; 2018-2019: Make retroactive a previous change made to the program in March 2024: Change the (previous) Writing Intensive requirement of FRSC 302 and FRSC 304 to FRSC 302 or FRSC 304. Please note that for 2025-2026, FRSC 304 will no longer be a WI course, so this update is only for previous catalog years.

~~Effective catalog years 2024-2025~~

Plan of Study:

Honors Information:

Accelerated Description/I
INTO-Mason Requirements
College Requirements
Department / Academic Uni
Program Outcomes

Additional Program Information

This information is required by the Office of Accreditation and Program Integrity.

Courses offered via distance (if applicable):

What is the primary delivery format for the program? Face-to-Face Only

Does any portion of this program occur off-campus?

No

Are you working with a vendor / other collaborators to offer your program?

No

Related Departments

Could this program prepare students for any type of professional licensure, in Virginia or elsewhere?

No

Are you adding or removing a licensure component?

No

Additional SCHEV & SACSCOC Information

Is this change a simple retitling of an existing program, with no other changes, to any existing program content, curriculum requirements, etc?

No

Does this change represent a repackaging of content in an existing approved degree/certificate program at the same instructional level (i.e., baccalaureate, master's, or doctoral)?

No

Percentage of total credits containing new course content. ("New course content" is defined by SACSCOC as content that is not currently included in an existing approved degree/certificate program at the same instructiona level. Do not exclude gen ed credits in calculations for undergraduate programs.)

0%-24%

Does this change include the addition of a distance education or face-to-face method of delivery for this program

No

Does this change include the addition of a course/credit-based competency-based education delivery option?

No

Will any additional equipment/facilities be needed?

No

Will any additional faculty be required?

No

Will any additional financial resources be needed?

No

Additional library/learning resources needed?

No

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

OAPI Use Only – Determination of SACSCOC Impact

Comments or Notes

Green Leaf Program Designation

Is this a Green Leaf program? No

Does this program cover material which crosses into another department?

No

Additional Attachments

SCHEV Proposal

Executive Summary

Reviewer Comments

Additional Comments

Is this course required of all students in this degree program?

%wi_required.eschtml%

Key: 145