

Program Change Request

Date Submitted: 10/08/24 1:38 pm

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

Last approved: 05/30/24 3:52 pm

Last edit: 11/08/24 9:53 am

Changes proposed by: kcarisi

**Catalog Pages
Using this Program**
[Forensic Science, BS](#)

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

No

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**

In Workflow

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

Approval Path

1. 10/08/24 2:10 pm
Mary O'Toole
(motoole2):
Approved for FRSC
Chair
2. 10/28/24 12:07 pm
Gregory Craft
(gcraft): Approved
for SC Curriculum
Committee
3. 11/06/24 4:17 pm
Jennifer Bazaz
Gettys (jbazaz):
Rollback to SC
Curriculum
Committee for SC
Assistant Dean

History

1. Nov 1, 2017 by
clmig-jwehrheim
2. Dec 7, 2018 by
Jennifer Bazaz
Gettys (jbazaz)
3. Dec 5, 2019 by
Jennifer Bazaz

Status

Concentration(s):

- 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)

	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: Adding upper level BIOL courses that are relevant to students pursuing a forensic science degree to the Supporting Sciences/Concentration Courses offering list for the following applicable concentrations: Criminalistics, Forensic Biology, and Interdisciplinary Forensic Science concentrations.

Why: All forensic science majors are required to take upper level science courses that may be relevant to their potential career path as a forensic science student. These courses fall under Supporting Science or Concentration Courses categories. This proposal requests the addition of several BIOL courses to be added to these course offering lists to give students more course options that are relevant to the field of forensic science under consultation with BIOL and FRSC faculty.

What: Providing a credit range for the Interdisciplinary Forensic Science Concentration credits.

Why: To allow sharing of credits in students degree audits between the concentration if a student chooses to select an approved minor and the major credits while retaining the minimum 8 unique credits in the minor.

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 ([Mason Core](#)) 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 (Mason Core)	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 (Mason Core) and Forensic Chemistry Laboratory ¹	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](#) Forensic Chemistry ([Mason Core](#)) 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 (Mason Core) and Forensic Chemistry Laboratory ¹	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](#) Forensic Chemistry ([Mason Core](#)) 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 (Mason Core) and Forensic Chemistry Laboratory ¹	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 ²
CHEM 337	Physical Chemistry Lab II
CHEM 422	Instrumental Methods of Chemical Analysis ²
CHEM 423	Instrumental Methods of Chemical Analysis Laboratory
CHEM 424	Principles of Chemical Separation ²
CHEM 427	Aquatic Environmental Chemistry
CHEM 441	Properties and Bonding of Inorganic Compounds ²
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

[FRSC 304](#) Forensic Chemistry ([Mason Core](#)) will satisfy this major's writing-intensive requirement.

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:**

Effective catalog years 2024-2025

Plan of Study:

**Honors
Information:**

Ac
INT

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 instructional 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

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

Jennifer Bazaz Gettys (jbazaz) (11/06/24 4:17 pm): Rollback: Additional edits were added, needs COSCC approval.

**Additional
Comments**

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

%wi_required.eshtml%

Key: 145