



Program Approval Form

For approval of new programs and deletions or modifications to an existing program.

Action Requested:

- Create New (SCHEV approval required except for minors)
- Inactivate Existing
- Modify Existing (check **ALL** that apply)
 - Title (SCHEV approval required except for minors)
 - Concentration** (Choose one): Add Delete Modify
 - Degree Requirements
 - Admission Standards/ Application Requirements
 - Other Changes: _____

Type (Check one):

- B.A. B.S. Minor
- Master's
- Ph.D.
- Undergraduate Certificate*
- Graduate Certificate*
- Bachelor's/Accelerated Master's Other:

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

Effective Term: Fall **Please note:** For students to be admitted to a new degree, minor, certificate or concentration, the program must be fully approved, entered into Banner, and published in the University Catalog.

Justification: (attach separate document if necessary)

	Existing	New/Modified
Program Title: (Required) Title must identify subject matter. Do not include name of college/school/dept.		
Concentration(s):		
Admissions Standards / Application Requirements: (Required only if different from those listed in the University Catalog)		
Degree Requirements: Consult University Catalog for models, attach separate document if necessary using track changes for modifications	Please see attached	Please see attached
Courses offered via distance: (if applicable)		
TOTAL CREDITS REQUIRED:		

*For Certificates Only: Indicate whether students are able to pursue on a Full-time basis Part-time basis

Approval Signatures

 Department Date College/School Date Provost's Office Date
Required for Minors and Interdisciplinary Programs

If this program may impact another unit or is in collaboration with another unit at Mason, 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	Unit Approval Name	Unit Approver's Signature	Date
Chemistry Department	Gerald Weatherspoon		
Biology Department	Larry Rockwood		
School of Systems Biology	Iosif Vaisman		

For Undergraduate Programs only

 Undergraduate Council Member Provost Office Undergraduate Council Approval Date

For Graduate Programs Only

 Graduate Council Member Provost Office Graduate Council Approval Date

Program 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.

FOR ALL PROGRAMS (required)

Program Title: Forensic Science Program

Date of Departmental Approval: September 8th 2016

FOR MODIFIED PROGRAMS (required if modifying a program)

- Summary of the Modification: The Bachelors of Science in Forensic Science degree is lacking forensic specific courses and natural science courses.
- Text before Modification (title, degree requirements, etc.): See Attached
- Text after Modification (title, degree requirements, etc.): See Attached
- Reason for the Modification: Our program is preparing for the Forensic Educational Programs Accreditation Commission (FEPAC) accreditation through the American Academy of Forensic Science (AAFS). AAFS is the leading forensic science professional organization in the United States. Our peer institutions already have obtained this accreditation; therefore, our program's goal is to update the curriculum to the FEPAC standards to be a more competitive program.

Two deficiencies that our program has identified and is proposing are an increase in forensic science courses and an increase in natural science courses. Therefore, we are proposing adding an already existing course as a required major requirement (FRSC 460 Forensic Molecular Biology). We are also proposing the addition of a course that is dedicated to and specializes in crime scene investigations (FRSC 401 Crime Scene Investigations). Both of these courses have been offered by most of our peer institutions. We have also proposed a new course to designate course credit for a forensic related internship (FRSC 406 Forensic Internship).

FEPAC also requires a method to evaluate the success in regard to student achievement. Our program has decided that this evaluation method will be best demonstrated in a comprehensive examination towards the end of the students' academic coursework (FRSC 499 Comprehensive Examination). Also, additional upper level biology, chemistry, and bioinformatics courses were also added to increase the natural science course requirements by FEPAC. We believe these changes will update our curriculum to meet or exceed the FEPAC standards and also make our program more competitive with our peer institutions.

Forensic Science Program
Undergraduate Modifications for Fall 2017

Major Requirement Changes (changes are indicated in red)

Current	Proposed
<p>Banner Code: SC-BS-FRSC College: <i>College of Science</i> Department: <i>Forensic Science Program</i> Students planning professional careers in the field of forensic science should choose this degree. Students must fulfill all Requirements for Bachelor's Degrees including the Mason Core. In addition, students majoring in forensic science must complete the following courses with a minimum GPA of 2.30. No more than two courses with a grade of 'D' (1.00) may be applied to the major.</p> <p>FRSC 302 and FRSC 304 will satisfy this major's writing-intensive requirement.</p>	<p>Banner Code: SC-BS-FRSC College: <i>College of Science</i> Department: <i>Forensic Science Program</i> Students planning professional careers in the field of forensic science should choose this degree. Students must fulfill all Requirements for Bachelor's Degrees including the Mason Core. In addition, students majoring in forensic science must complete the following courses 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.</p> <p>FRSC 302 and FRSC 304 will satisfy this major's writing-intensive requirement.</p>
<p>Forensic Science Core Courses (21 credits)</p> <ul style="list-style-type: none"> • FRSC 200 - Survey of Forensic Science Credits: 3 • FRSC 201 - Introduction to Criminalistics Credits: 3 • FRSC 302 - Forensic Trace Analysis Credits: 3 • FRSC 303 - Forensic Evidence and Ethics Credits: 3 • FRSC 304 - Forensic Chemistry Credits: 3 • FRSC 405 - Independent Studies / Research Credits: 3 • CRIM 100 - Introduction to Criminal Justice Credits: 3 (Mason Core: Social and Behavioral Science course) <p>Natural Science Core Courses (45-46 credits)</p> <ul style="list-style-type: none"> • BIOL 213 - Cell Structure and Function Credits: 4 (Mason Core: Natural Science course) • BIOL 214 - Biostatistics for Biology Majors Credits: 4 or STAT 250 - Introductory Statistics I Credits: 3 (Mason Core: Quantitative Reasoning course) • BIOL 430 - Advanced Human Anatomy and Physiology I Credits: 4 • BIOL 431 - Advanced Human Anatomy and Physiology II Credits: 4 • CHEM 211 - General Chemistry I Credits: 3 (Mason Core: Natural Science course) and CHEM 213 - General Chemistry Laboratory I Credits: 1 • CHEM 212 - General Chemistry II Credits: 3 (Mason Core: Natural Science course) and CHEM 214 - General Chemistry Laboratory II Credits: 1 	<p>Forensic Science Core Courses (27 credits)</p> <ul style="list-style-type: none"> • FRSC 200 - Survey of Forensic Science Credits: 3 • FRSC 201 - Introduction to Criminalistics Credits: 3 • FRSC 302 - Forensic Trace Analysis Credits: 3 • FRSC 303 - Forensic Evidence and Ethics Credits: 3 • FRSC 304 - Forensic Chemistry Credits: 3 • FRSC 401- Crime Scene Investigations Credits: 3 • FRSC 405 - Independent Studies / Research Credits: 3 or FRSC 406 Forensic Internship Credits: 3 • FRSC 460 Forensic Molecular Biology Credits: 3 • FRSC 499 Comprehensive Exam Credits: 0 • CRIM 100 - Introduction to Criminal Justice Credits: 3 (Mason Core: Social and Behavioral Science course) <p>Natural Science Core Courses (45-46 credits)</p> <ul style="list-style-type: none"> • BIOL 213 - Cell Structure and Function Credits: 4 (Mason Core: Natural Science course) • BIOL 214 - Biostatistics for Biology Majors Credits: 4 or STAT 250 - Introductory Statistics I Credits: 3 (Mason Core: Quantitative Reasoning course) • BIOL 311- General Genetics Credits: 4 • BIOL 430 - Advanced Human Anatomy and Physiology I Credits: 4 • CHEM 211 - General Chemistry I Credits: 3 (Mason Core: Natural Science course) and CHEM 213 - General Chemistry Laboratory I Credits: 1 • CHEM 212 - General Chemistry II Credits: 3 (Mason Core: Natural Science course) and CHEM 214 - General Chemistry Laboratory II Credits: 1 • CHEM 313 - Organic Chemistry Credits: 3

- CHEM 313 - Organic Chemistry Credits: 3
- CHEM 314 - Organic Chemistry II Credits: 3
- CHEM 315 - Organic Chemistry Lab I Credits: 2
- CHEM 318 - Organic Chemistry Lab II Credits: 2
- MATH 113 - Analytic Geometry and Calculus I Credits: 4 (Mason Core: Quantitative Reasoning course)
- PHYS 243 - College Physics Credits: 3 (Mason Core: Natural Science course)
- PHYS 244 - College Physics Lab Credits: 1 (Mason Core: Natural Science course)
- PHYS 245 - College Physics Credits: 3 (Mason Core: Natural Science course)
- PHYS 246 - College Physics Lab Credits: 1 (Mason Core: Natural Science course)

Additional Courses (8 credits)

Select courses from:

- BIOL 305 - Biology of Microorganisms Credits: 3
- BIOL 306 - Biology of Microorganisms Laboratory Credits: 1
- **BIOL 311 - General Genetics Credits: 4**
- CHEM 321 - Elementary Quantitative Analysis Credits: 4
- CHEM 422 - Instrumental Analysis Credits: 3
- CHEM 423 - Instrumental Analysis Laboratory Credits: 2
- CHEM 463 - General Biochemistry I Credits: 4

Mason Core and Electives (45-46 credits)

In order to meet a minimum of 120 credits, this degree requires an additional 45-46 credits, which may be applied towards any remaining Mason Core requirements (outlined below), Requirements for Bachelor's Degrees, and elective courses. Students are strongly encouraged to consult with their advisors to ensure that they fulfill all requirements.

- CHEM 314 - Organic Chemistry II Credits: 3
- CHEM 315 - Organic Chemistry Lab I Credits: 2
- CHEM 318 - Organic Chemistry Lab II Credits: 2
- MATH 113 - Analytic Geometry and Calculus I Credits: 4 (Mason Core: Quantitative Reasoning course)
- PHYS 243 - College Physics Credits: 3 (Mason Core: Natural Science course)
- PHYS 244 - College Physics Lab Credits: 1 (Mason Core: Natural Science course)
- PHYS 245 - College Physics Credits: 3 (Mason Core: Natural Science course)
- PHYS 246 - College Physics Lab Credits: 1 (Mason Core: Natural Science course)

Additional Courses (14 credits)

Select courses from:

- **BINF 401- Bioinformatics and Computational Biology I Credits: 3**
- **BINF 402- Bioinformatics and Computational Biology II Credits: 3**
- BIOL 305 - Biology of Microorganisms Credits: 3
- BIOL 306 - Biology of Microorganisms Laboratory Credits: 1
- **BIOL 404- Medical Microbiology Credits: 3**
- **BIOL 405- Microbial Genetics Credits: 4**
- **BIOL 431- Advanced Human Anatomy and Physiology II Credits: 4**
- **BIOL 452- Immunology Credits: 3**
- **BIOL 453- Immunology Lab Credits: 1**
- **BIOL 482- Introduction to Molecular Genetics Credits: 3**
- CHEM 321 - Elementary Quantitative Analysis Credits: 4
- **CHEM 331- Physical Chemistry I Credits: 3**
- **CHEM 332- Physical Chemistry II Credits: 3**
- **CHEM 336- Physical Chemistry Lab I Credits: 2**
- **CHEM 337- Physical chemistry Lab II Credits: 2**
- CHEM 422 - Instrumental Analysis Credits: 3
- CHEM 423 - Instrumental Analysis Laboratory Credits: 2
- **CHEM 427- Aquatic Environmental Chemistry Credits: 3**
- **CHEM 441- Properties and Bonding of Inorganic Compounds Credits: 3**
- **CHEM 446- Bioinorganic Chemistry Credits: 3**
- CHEM 463 - General Biochemistry I Credits: 4
- **CHEM 464- General Biochemistry II Credits: 3**
- **CHEM 465- Biochemistry Lab Credits: 2**

Mason Core and Electives (33-34 credits)

In order to meet a minimum of 120 credits, this degree requires an additional 33-34 credits, which may be applied towards any remaining Mason Core requirements (outlined below), Requirements for Bachelor's Degrees, and elective courses. Students are strongly encouraged to consult with their advisors to ensure that they fulfill all requirements.
