Graduate Handbook 2017-2018
Graduate Program Mission & Goals

Mission:
The mission of the VCU Master of Science in Forensic Science Program is to prepare students for careers as forensic scientists in government and private forensic laboratories. In addition, students will be prepared to pursue further graduate and/or professional academic degrees.

Supporting Goals:
- Students will be able to apply basic principles and laboratory procedures of Biology and Chemistry to forensic evidence analysis.
- Students will demonstrate the capabilities, use, potential and limitations of forensic laboratory theory and techniques.
- Students will demonstrate an understanding of legal procedure and the rules of evidence.
- Students will demonstrate ethical and professional duties and responsibilities of the forensic scientist.
- Students will demonstrate the ability to perform, report and orally present independent research in an area of forensic science.

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I'm accepted into the program, now what?
The VCU Graduate School website is a great resource for students throughout the application and acceptance process. Once accepted, go to http://graduate.admissions.vcu.edu/accepted/checklist/ for a checklist of important tasks to complete.

Where can I find information about housing?
For information about off-campus housing, go to https://offcampus.housing.vcu.edu/
For information about on-campus housing, go to http://www.housing.vcu.edu/. Also, check the graduate school’s website for a list of classifieds, housing options.

What about working while I am in school?
The graduate program is full-time and rigorous. We recommend against full-time employment. If you are eligible for work-study, the University Career Center posts work-study openings here. There also may be laboratory and teaching job opportunities in the Department of Forensic Science and other departments with which we work closely. We will alert you by email as these opportunities become available.

What is the cost of tuition? Where can I find information about financial aid and scholarships?
Tuition and fees are listed on the Student Accounting web page, located at Student Accounting. Financial Aid and scholarship information are located at Financial Aid.

Will I need a car? What about parking?
Previous graduate students recommend that it is better to have your own transportation. Classes are held both at DFS and VCU day and evening. Free parking is available at DFS after 4:30 in its parking lot. VCU parking information is available at VCU parking. Day or evening-only parking permits can be purchased for on-campus parking; in addition, free, first-come, first-served on-street parking is available near some classes. If you plan to get an on-campus pass it is best to contact Parking and Transportation early to inquire about your pass as they sell out quickly.

When is orientation?
Each year the Graduate School, in conjunction with the Graduate Student Association, holds graduate student orientation with speakers, tables of information and lunch. The University orientation is on the Friday before fall classes start. Expect to receive an e-mail invitation with the details concerning this event by mid-summer.

The Department also sponsors a graduate program orientation each year during the week of the beginning of fall classes. This graduate program orientation is followed by individual advising sessions for each student with his or her academic advisor.

How do I get my picture ID?
Your VCU Card can be obtained on the day of Graduate Student Orientation. Bring a photo ID and a copy of your Fall schedule to the Technology Administration Building on Broad Street. If you are unable to attend orientation, you can obtain your VCU Card the following week during VCU Card business hours. (For more information, see https://vcucard.vcu.edu/myid.)
How do I get my VCU e-mail account?
Your VCU e-mail address is the university’s official form of communication. The first step is to get your eID, to do so, visit https://eidfinder.vcu.edu/. To obtain your VCU e-mail address, add your eID to @vcu.edu. Then go to https://mymail.vcu.edu/ to access your account.

Where are classes held?
Classes are held at both VCU and DFS Central Laboratory. The majority of the Forensic Science courses offered at VCU are held on the Monroe Park campus, however there are some courses on the Medical campus. DFS’s Central Laboratory is located at 700 N. 5th Street.

What courses do I take my first semester and how do I register?
You register online for the classes you will take during your first semester at VCU (totaling 10 credits):
FRSC 570, Forensic Science Seminar (1)
FRSC 671, Instrumentation in Forensic Chemistry (3)
FRSC 673, Forensic Microscopy (2)
FRSZ 673L, Forensic Microscopy Laboratory (1)
FRSC 675, Forensic Serology and DNA Analysis (2)
FRSZ 675L, Forensic Serology and DNA Analysis Laboratory (1)
To register, log into VCU eServices and click on Registration under the Student menu.

Can I register for additional classes above these 10 credits?
At VCU, graduate students registered for 9 credits are given full-time status. Additionally, the depth of knowledge and demands of coursework will increase with graduate school. Thus, we do not recommend that first semester students take above the 10 prescribed credit hours. Students admitted provisionally may be required to complete additional coursework during the first and/or second semester of enrollment.

Are all Forensic Science courses offered each semester?
Required Forensic Science courses are offered at least once per year. Occasionally, additional sections of a course may be added if needed. Courses outside of the Forensic Science Department are offered throughout the year. Students will be advised each semester prior to registration by their advisors on what courses will be available in upcoming semesters.

After being admitted to one concentration track, is it possible to change tracks?
Students may request to change their concentration track by submitting a letter to the Forensic Science Graduate Committee detailing the request and justification. These requests will be considered only on a case-by-case basis and only when the appropriate admissions requirements are met.

Can I complete two concentration tracks?
Yes & no. Students who wish to complete a second track may submit a formal request to the Forensic Science Graduate Committee. However, these requests are rarely granted due to the significant overlap in the curricula. These requests will only be considered when students have completed all admissions requirements for the new track and have a solid justification for the request. Generally, students are able to take additional courses of interest even when not required in their track—thus, it may not be necessary nor helpful to formally add a second track.
The Master of Science is one of only a few FEPAC-accredited programs of its kind in the United States. The objective of the Master of Science in Forensic Science program is to prepare students for careers as forensic scientists in government and private forensic laboratories. In addition, students will be prepared to pursue further graduate and/or professional academic degrees, if desired.

Core courses in the Master of Science in Forensic Science curriculum offer broad exposure to forensic laboratory equipment and instrumentation and exposure to criminal procedures and expert testimony, forensic biology, forensic chemistry, trace evidence, physical evidence, professional ethics, quality assurance, and current topics in research and development within the forensic sciences. Students entering this program are offered the opportunity to specialize within the field. Tracks offered include Forensic Biology, Forensic Chemistry/Drugs & Toxicology, Forensic Chemistry/Trace Analysis, and the Forensic Physical Analysis track. Throughout the curriculum, a strong emphasis is placed on laboratory course work, providing students with significant laboratory experience prior to graduation. Several of the laboratory courses are taught by practicing professional forensic scientists at the Virginia Department of Forensic Science’s Central Laboratory, which is nationally accredited by the American Society of Crime Laboratory Directors-Laboratory Accreditation Board.

The graduate program is a full-time, two year program. Courses taken will vary depending on the track selected. Required and elective courses are offered at various times, day and night, throughout the week. The Master of Science in Forensic Science degree requires 42 semester hours of course work including 27 semester hours of required core course work and 15 semester hours of specialized course work designed for each track (including electives). The required coursework includes Directed Research which is an extensive research experience conducted within a forensic laboratory setting.

**Program Features**

- Small class sizes.
- Distinguished faculty.
- Courses taught by current or former practicing forensic scientists.
- Active research programs in multiple forensic science disciplines.
- Location in the state capital provides a rich environment for both classroom learning and directed research.
- Hands-on laboratory courses using modern crime laboratory equipment taught on-campus and at the Virginia Department of Forensic Science Central Laboratory.
- Computerized library facilities allow for remote access.
**Curriculum - Course Requirements**

**Master of Science in Forensic Science degree**  (42 credits)

Core requirements
(27 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>STAT/BIOS 543 Statistical Methods I or FRSC 580 Applied Statistics for Forensic Science or FRSC 570 Forensic Science Seminar*+ (1 credit each)</td>
<td>3</td>
</tr>
<tr>
<td>FRSC 661 Analysis of Pattern Evidence (lecture/laboratory) or FRSC 662 Firearm and Toolmark Identification (lecture/laboratory)</td>
<td>3</td>
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<tr>
<td>FRSC 670 Forensic Evidence and Criminal Procedure</td>
<td>3</td>
</tr>
<tr>
<td>FRSC 671 Instrumentation in Forensic Chemistry*</td>
<td>3</td>
</tr>
<tr>
<td>FRSC 673 Forensic Microscopy*</td>
<td>2</td>
</tr>
<tr>
<td>FRSZ 673L Forensic Microscopy Laboratory*</td>
<td>1</td>
</tr>
<tr>
<td>FRSC 675 Forensic Serology and DNA Analysis*</td>
<td>2</td>
</tr>
<tr>
<td>FRSZ 675L Forensic Serology and DNA Analysis Laboratory*</td>
<td>1</td>
</tr>
<tr>
<td>FRSC 677 Professional Practices &amp; Expert Testimony</td>
<td>3</td>
</tr>
<tr>
<td>FRSC 793 Directed Research in Forensic Science</td>
<td>3</td>
</tr>
</tbody>
</table>

* Courses required the first fall semester upon entry into the Forensic Science Program.

+ This course is one credit; three credits total must be taken; one credit must be completed in each semester of the first full year of enrollment.
Electives
(6-9 credits; see concentration track for requirements)

FRSC 505 Forensic Entomology 3
FRSC 510 Developmental Osteology 3
FRSC 515 Advanced Forensic Anthropology 3
FRSC 520 Forensic Fire Investigation 3
FRSC 565 Scientific Crime Scene Investigation (lecture/laboratory) 3
FRSC 566 Advanced Crime Scene Investigation (lecture/laboratory) 3
FRSC 591 Topics in Forensic Science 1-3
FRSC 607 Forensic Taphonomy 3
FRSC/PHTX 644 Forensic Toxicology 3
FRSC 661 Analysis of Pattern Evidence (lecture/laboratory) 3
FRSC 662 Firearms and Toolmark Identification (lecture/laboratory) 3
FRSC 663 Forensic Medicine 3
FRSC 672 Advanced Drug Analysis (lecture/laboratory) 3
FRSC 676 Advanced Forensic DNA Analysis (lecture/laboratory) 3
FRSC/CRJS 680 Forensic Psychiatry 3
FRSC 681 Analysis of Fire Debris and Explosives (lecture/laboratory) 3
FRSC 682 Forensic Analysis of Paints and Polymers (lecture/laboratory) 3
FRSC 690 Scientific Writing 1
FRSC 692 Forensic Science Independent Study 3
FRSC 693 Current Topics in Forensic Science 1
BIOC 503 Biochemistry, Cell and Molecular Biology I 5
BIOC 504 Biochemistry, Cell and Molecular Biology II 5
BIOL 530/HGEN 501 Human Genetics 3
BIOL 540 Molecular Genetics 3
BIOL 693 Current Topics: Molecular Biology 1
CHEM 506 Introduction to Spectroscopic Methods 1.5
CHEM 606 Advanced Spectroscopic Methods 1.5
CHEM 630 Electroanalytical Chemistry 1.5
CHEM 631 Separation Science 1.5
CHEM 632 Chemometrics 1.5
CHEM 633 Mass Spectrometry 1.5
CHEM 634 Surface Science 1.5
CHEM 635 Spectrochemical Analysis 1.5
CRJS 591 Special Topics: Drugs and Crime 3
PHIS 501 Mammalian Physiology 5
PHTX 536 Principles of Pharmacology and Toxicology I 5
PHTX 548 Drug Dependence 3

Electives for each concentration track must be selected with academic advisor. Other electives may be permitted with permission of adviser. This is not a comprehensive list.

Financial Aid Information
Forensic Biology

Admission requirements
In addition to the M.S. in Forensic Science general admission requirements, applicants to the forensic biology track should have a minimum of nine semester credits or equivalent of upper level coursework in the biological or biochemical sciences. This may include, but is not limited to, coursework in cell biology, general biochemistry, genetics, and/or molecular biology.

Degree requirements
The forensic biology track requires a minimum of 15 additional credit hours beyond the core coursework for a total of 42 credit hours. See general degree requirements for the core curriculum.

In addition to the core curriculum, the following courses are required for the forensic biology track:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>FRSC 565 Scientific Crime Scene Investigation</td>
<td>3</td>
</tr>
<tr>
<td>FRSC 676 Advanced Forensic DNA Analysis</td>
<td>3</td>
</tr>
<tr>
<td>BIOL/HGEN 516 Population Genetics</td>
<td>3</td>
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<tr>
<td>Electives*</td>
<td>6</td>
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</tbody>
</table>

*Electives must be selected with academic advisor; at least 1 elective course must be a graduate-level molecular biology-related course

Forensic Chemistry/Drugs & Toxicology

Admission requirements
In addition to the M.S. in Forensic Science general admission requirements, applicants to the forensic chemistry/drugs & toxicology track should have a minimum of nine semester credits or equivalent of upper level chemistry or biochemistry coursework. This may include, but is not limited to, coursework in physical chemistry, instrumental analysis, quantitative analysis, pharmacology, and/or general biochemistry.

Degree requirements
The forensic chemistry/drugs & toxicology track requires a minimum of 15 additional credit hours beyond the core coursework for a total of 42 credit hours. See general degree requirements for the core curriculum.

In addition to the core curriculum, the following courses are required for the forensic chemistry/drugs & toxicology track:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>FRSC/PHTX 644 Forensic Toxicology</td>
<td>3</td>
</tr>
<tr>
<td>FRSC 663 Forensic Medicine or FRSC 565</td>
<td>3</td>
</tr>
<tr>
<td>FRSC 672 Advanced Drug Analysis (lecture/laboratory)</td>
<td>3</td>
</tr>
<tr>
<td>Electives*</td>
<td>6</td>
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</tbody>
</table>

*Electives must be selected with academic advisor; at least 1 elective course must be a graduate-level chemistry course
Forensic Chemistry/Trace Analysis

Admission requirements
In addition to the M.S. in Forensic Science general admission requirements, applicants to the forensic chemistry/trace analysis track should have a minimum of nine semester credits or equivalent of upper level chemistry coursework. This may include, but is not limited to, coursework in physical chemistry, instrumental analysis, quantitative analysis, and/or inorganic chemistry.

Degree requirements
The forensic chemistry/trace track requires a minimum of 15 additional credit hours beyond the core coursework for a total of 42 credit hours. See general degree requirements for the core curriculum.

In addition to the core curriculum, the following courses are required for the forensic chemistry/trace track:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>FRSC 565 Scientific Crime Scene Investigation (lecture/laboratory)</td>
<td>3</td>
</tr>
<tr>
<td>FRSC 681 Analysis of Fire Debris &amp; Explosives (lecture/laboratory)</td>
<td>3</td>
</tr>
<tr>
<td>FRSC 682 Forensic Analysis of Paints &amp; Polymers (lectures/laboratory)</td>
<td>3</td>
</tr>
<tr>
<td>Electives*</td>
<td>6</td>
</tr>
</tbody>
</table>

*Electives must be selected with academic advisor; at least 1 elective course must be a graduate-level chemistry course

Forensic Physical Evidence Analysis

Admission requirements
In addition to the M.S. in Forensic Science general admission requirements, applicants to the forensic physical analysis track should have a minimum of nine semester credits or equivalent of upper level science coursework. This may include, but is not limited to, coursework in the areas of biology, chemistry, physics, or biochemistry.

Degree requirements
The forensic physical analysis track requires a minimum of 15 additional credit hours beyond the core coursework for a total of 42 credit hours. See general degree requirements for the core curriculum.

In addition to the core curriculum, the following courses are required for the forensic physical analysis track:

<table>
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<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>FRSC 565 Scientific Crime Scene Investigation (lecture/laboratory)</td>
<td>3</td>
</tr>
<tr>
<td>FRSC 566 Advanced Crime Scene Investigation (lecture/lab)</td>
<td>3</td>
</tr>
<tr>
<td>FRSC 661 Analysis of Pattern Evidence (lecture/laboratory) or FRSC 662 Firearm and Toolmark Identification (lecture/laboratory)</td>
<td>3</td>
</tr>
<tr>
<td>Electives*</td>
<td>6</td>
</tr>
</tbody>
</table>

*Electives must be selected with academic advisor
FRSC 505 Forensic Entomology
Semester course; 3 lecture hours. 3 credits. Prerequisite: Permission of Instructor. Focuses on the proper techniques in the taxonomic identification of forensic insects and proper methods of postmortem interval determinations. Students will be responsible for the identification of insects, a reference collection of specimens, and the processing of a mock crime scene for entomological evidence. *(Not offered on a regular basis)*

FRSC 510. Developmental Osteology
Semester course; 2 lecture and 2 laboratory hours. 3 credits. Prerequisite: FRSC 300; ANTH 307 and ANTZ 307; ANTH 310; graduate standing in forensic science; or permission of instructor. Examines the human musculoskeletal system and its development from an embryonic state to the adult form. Students learn the developmental course of each bone in the human skeleton and those of the associated soft tissue structures. Students are provided with training in the recognition of skeletal elements and bony landmarks, siding skeletal elements (and fragments thereof), knowledge of muscle structure and function and knowledge of nervous and venous structures associated with bony landmarks. Developmental defects and trauma associated with birth and child abuse are discussed. Juvenile age estimation from bones and radiographic images are emphasized.

FRSC 515. Advanced Forensic Anthropology
Semester course; 2 lecture and 2 laboratory hours. 3 credits. Prerequisite: FRSC 510; ANTH 307 and ANTZ 307; or permission of instructor. Focuses on estimation of the biological profile, statistical basis of estimations, pathological conditions, analysis of antemortem and perimortem trauma, human identification in mass casualty situations, age estimation of living individuals and writing of case reports. Techniques discussed will include macroscopic and microscopic analysis of morphology, histological analysis, radiographs and CT scans. There is a significant laboratory component.

FRSC 520 Forensic Fire Investigation
Semester course; 3 lecture hours. 3 credits. Prerequisite: FRSC 375, FRSC 670 or equivalent. Examines the specialized field of forensic fire investigation including on-scene investigation, fire theory, accelerant-assisted burn patterns and expert-witness testimony.

FRSC 565 Scientific Crime Scene Investigation
Semester course; 3 lecture and/or laboratory hours. 3 credits. Presents the theory and techniques of scientific crime scene investigation including: recognition, documentation, collection and enhancement of physical evidence. A comprehensive introduction to the use of physical evidence for crime scene reconstruction is presented.
FRSC 566 Advanced Crime Scene Investigation
Semester course; 3 lecture hours. 3 credits. Prerequisite: FRSC 309, FRSC 565 or equivalent. An advanced study of the methods and techniques of crime scene investigation with an emphasis on crime scene reconstruction by the use of physical evidence. Course will include extensive practical applications with mock crime scenes.

FRSC 570 Forensic Science Seminar
Semester course; 1 lecture hour. 1 credit. A seminar course featuring presentations by faculty, crime laboratory staff, students, and visiting lecturers. Instruction includes discussions of research and developments and current topics in various forensic science disciplines and related fields. Must be repeated a minimum of three times for three credits. (Offered every semester)

FRSC 580. Applied Statistics for Forensic Science
Semester course; 3 lecture hours. 3 credits. Prerequisite: STAT 210, STAT 212 or equivalent statistics knowledge; or graduate standing in forensic science. The course will focus on the forensic applications of data visualization methods, hypothesis testing, analysis of variance, correlation measures, regression, multivariate analyses and concepts in database "matching" procedures. Techniques discussed will include ANOVA, MANOVA, principal component analysis, non-metric multidimensional scaling, discriminant function analysis and machine learning/neural network analysis.

FRSC 591 Topics in Forensic Science
Semester course; variable lecture hours. 1-3 credits; maximum of six credits for all forensic science topic courses may be applied to major. Prerequisite: Graduate standing in the forensic science program or permission of instructor required for enrollment. A study in selected topics in forensic science. See the Schedule of Classes for specific topics to be offered each semester and additional prerequisites.

FRSC 607. Forensic Taphonomy.
Semester course; 3 lecture hours. 3 credits. Focuses on the process and sequence of human decomposition, as well as the burial, water disposal and surface dispersal of human remains. The course covers current issues in taphonomic research and practical application, including both domestic and international examples of mass disasters and mass graves. An understanding of the principles of archaeological stratigraphy is an integral part of the course. There is a significant laboratory component.
Curriculum Course Descriptions (cont.)

**FRSC 644/PHTX 644 Forensic Toxicology**
Semester course; 2 lecture and 2 laboratory hours. 3 credits. Lecture and demonstrations in which common poisons and groups of poisons are discussed as to detection, diagnosis and treatment of poisoning. Demonstrations include basic principles of analytical toxicology, forensic science and courtroom testimony.

**FRSC 661 Analysis of Pattern Evidence**
Semester course; 2 lecture/3 laboratory hours. 3 credits. Prerequisites: FRSC 673 and FRSZ 673L or equivalents. This course covers topics in Pattern Evidence analysis including analysis of latent prints, impression evidence, and bloodstain pattern analysis as applied to forensic casework. The course covers both the theoretical and practical aspects, using lectures and laboratory exercises focusing on the collection, analysis of, and interpretation of pattern evidence.

**FRSC 662 Firearm and Toolmark Identification**
Semester course; 2 lecture/3 laboratory hours. 3 credits. Prerequisites: FRSC 673 and FRSZ 673L or equivalents. This course covers topics in Firearm and Toolmark Identification as applied to forensic casework. The course covers both the theoretical and practical aspects, using lectures and laboratory exercises.

**FRSC 663 Forensic Medicine**
Semester course; 3 lecture hours. 3 credits. Covers the fundamentals of forensic medicine including topics such as forensic death investigations, postmortem changes, time-of-death determinations, identification of unknown human remains and the forensic pathology of natural and traumatic deaths in adults and children. The characteristics and diagnosis of various types of trauma as well as the characteristics of common natural diseases that cause sudden death will be presented.

**FRSC 670 Forensic Evidence and Criminal Procedure**
Semester course; 3 lecture hours. 3 credits. Presents the law of criminal procedure and rules of evidence as applied to forensic science. Explores issues of scientific versus legal burdens of proof, legal terminology and trial procedure.

**FRSC 671 Instrumentation in Forensic Chemistry**
Semester course; 3 lecture hours. 3 credits. Theory and applications of chromatography, mass spectrometry and spectroscopy as used in modern crime laboratories. Instruction will focus on instrumental analysis as applied to drug analysis, toxicology, fire debris identification and general trace evidence examination.
Curriculum Course Descriptions (cont.)

FRSC 672 Advanced Drug Analysis
Semester course; 3 lecture and/or laboratory hours. 3 credits. Isolation and identification of abused drugs emphasizing the analysis of unknowns, problems encountered in analysis, and chain of custody issues.

FRSC 673 Forensic Microscopy
Semester course; 2 lecture hours. 2 credits. This course establishes the foundation for the theory of microscopy. The knowledge acquired in this course can be applied to forensic disciplines such as firearms examinations, forensic biology, controlled substances, questioned documents and trace evidence.

FRSC 675 Forensic Serology & DNA Analysis
Semester course; 2 lecture hours. 2 credits. This course presents the theory and methodology used for the examination and identification of body fluid stains and determination of species. The course also provides students an introduction to the theory and methodology of forensic DNA analysis as well as forensic DNA quality control issues. Instruction will focus on molecular biology techniques as they are applied in a forensic DNA crime laboratory setting.

FRSC 676 Advanced Forensic DNA Analysis
Semester course; 2 lecture/3 laboratory hours. 3 credits. This course focuses on the specific principles and modern procedures used for analysis of forensic nuclear and mitochondrial DNA evidence. Other topics include current research and development for forensic DNA instrumentation and applications, statistical interpretation of results, and case report writing. Students gain individualized, hands-on experience with DNA procedures and instrumentation in the laboratory exercises. Students will process mock forensic casework.

FRSC 677 Professional Practices and Expert Testimony
Semester course; 3 lecture hours. 3 credits. Prerequisite: must have successfully completed a minimum of 18 credit hours in the forensic science master's degree program. Topics related to professional practices in the forensic science field will be covered, including ethics, bias, quality assurance, laboratory management and professional development. Individual and group activities relating to these topics will be completed. Additionally, this course will examine forensic expert testimony in the courtroom, communication of scientific findings to a general audience, trial preparation and cross-examination in moot court format.
Curriculum Course Descriptions (cont.)

FRSC 680/CRJS 680 Forensic Psychiatry
Semester course; 3 lecture hours. 3 credits. Guilty mind requirements in criminal law. Competency to stand trial, insanity defense, mental disorder and crime. Behavioral profiling of serial murders and sex offenders. Issues in the use of clinical and statistical prediction methods in criminal justice. (Not currently offered)

FRSC 681 Analysis of Fire Debris and Explosives
Semester course; 2 lecture/3 laboratory hours. 3 credits. Prerequisites: FRSC 671, FRSC 673 and FRSZ 673L or equivalents. This course presents the collection, analysis, and interpretation of fire debris and explosives as they are applied in forensic casework. The course covers the theoretical and practical aspects. Laboratory exercises include hands-on instruction with appropriate instrumentation and techniques, including stereomicroscopy, gas chromatography, GC-MS, thin layer chromatography, HPLC, and FT-IR.

FRSC 682 Forensic Analysis of Paint & Polymers
Semester course; 5 lecture/laboratory hours. 3 credits. Prerequisites: FRSC 671, FRSC 673 and FRSZ 673L or equivalents. This course covers topics in paint & polymer analysis including collection, classification, and analysis of paint and fiber evidence as applied to forensic casework. The course covers the theoretical and practical aspects, using lectures and laboratory exercises. Laboratory exercises include hands-on instruction with appropriate instrumentation and techniques, including stereomicroscopy, microchemical testing, fluorescence molecular tomography, fluorescence microscopy, FT-IR, and polarizing light microscopy.

FRSC 690. Scientific Writing
Semester course; 1 lecture hour. 1 credit. Enrollment restricted to students in the M.S. in Forensic Science program. Focuses on scientific writing techniques, including abstracts, posters, review articles and research proposals. Emphasis will be placed on writing for scientific journals in forensic science and other peer-reviewed journals.

FRSC 692 Forensic Science Independent Study
Semester course; variable hours. 1-3 credits. Maximum credit for all independent study is 6 credits. The amount of credit must be determined, and written permission of instructor and program director must be obtained prior to registration for this course. A course designed to provide an opportunity for independent research in an area of forensic science. The products of this experience will be an oral presentation at a campus seminar and written report.
Curriculum Course Descriptions (cont.)

FRSC 693 Current Topics in Forensic Science
Semester course; 1 lecture hour. 1 credit. May be repeated for credit. A course designed to develop skills in reading journal manuscripts and delivering oral presentations in conjunction with an in-depth study of a current topic in forensic science. Student will conduct library research, present talks and lead discussions on the selected topic. See the Schedule of Classes for specific current topics course to be offered each semester and prerequisites.

FRSC 793 Directed Research in Forensic Science
Semester course; variable laboratory hours. 1-3 credits. Prerequisite: Must have successfully completed a minimum of 18 credit hours in the forensic science master's degree program or have permission of the instructor. Students must apply to the program director for this directed research experience one semester in advance of enrollment. A capstone course in which students will conduct independent, original laboratory research in a forensic specialization area of interest, while also gaining practical experience in crime laboratory practices and methods. This laboratory research experience will culminate in a presentation of the project results at a campus seminar and/or professional conference, and a written technical report of publishable quality. A minimum of 300 hours of laboratory research and a minimum of 3 credits are required for graduation.

FRSZ 673L Forensic Microscopy Laboratory
Semester course; 3 laboratory hours. 1 credit. This course establishes the foundation for the application and methodology of microscopy. The knowledge acquired in this course can be applied to forensic disciplines such as firearms examinations, forensic biology, controlled substances, questioned documents and trace evidence. The course consists of laboratory exercises and demonstrations.

FRSZ 675L Forensic Serology & DNA Analysis Laboratory
Semester course; 3 laboratory hours. 1 credit. This course presents the chemical, immunological, and microscopic laboratory techniques commonly used for the examination and identification of body fluid stains and determination of species. The course provides working knowledge and hands-on practice with basic forensic DNA procedures, including DNA extractions, quantitation, PCR amplification and analysis/genotyping. Instruction focuses on molecular biology techniques as applied in a forensic DNA laboratory.

For more course descriptions including applicable courses in other departments consult your advisor or see the searchable course description website: http://www.pubapps.vcu.edu/vcucourses/
The following requirements are in addition to those described for graduate programs in the School of Graduate Studies and the College of Humanities and Sciences.

- Students must complete a minimum of 42 graduate semester credits as outlined in the accompanying list of core and track requirements, including electives.

- Maintenance of an ongoing, cumulative GPA of 3.0 or above is required while enrolled.

- Courses below the 500 level do not count toward degree requirements.

- Receipt of a grade of “C” in two or more courses will constitute an automatic dismissal from the forensic science graduate program.

- Receipt of a grade of “D” or lower in any one course will constitute an automatic dismissal from the forensic science graduate program.

- Continuous, full-time enrollment in the graduate program is required. Interruption in continuous enrollment or full-time status for any reason without a leave of absence approved by the Forensic Science Graduate Committee will require that students reapply to the program.

- Request for credit for graduate course work taken at other institutions must be submitted to the director of graduate studies in Forensic Science and will be considered on a case-by-case basis by the Forensic Graduate Committee.

- If course work deficiencies are identified, students may be required to take additional foundational courses beyond those listed below. These will not count towards the 42 required credits.
Example Semester-by-Semester Schedules

1st Year

Fall
FRSC 673 Forensic Microscopy (2)
FRSZ 673L Forensic Microsc Lab (1)
FRSC 675 Forensic Serology & DNA (2)
FRSZ 675L Forensic Serol & DNA Lab (1)
FRSC 671 Instrumentation Forensic Chem (3)
FRSC 570 Forensic Science Seminar (1)

Spring
FRSC 670 For Evidence & Criminal Procedure (3)
STAT 543 Statistical Methods † (3)
TRACK ELECTIVE/REQMNT (3) — or — Patterns requirement* (3)
FRSZ 675L Forensic Serol & DNA Lab (1)
FRSC 570 Forensic Science Seminar (1)

Total Credits - 10

2nd Year

Fall
Patterns requirement* (3)
Crime Scene requirement ^ (3)
TRACK ELECTIVE/REQMNT (3)
FRSC 793 Directed Research‡ (1.5)

Spring
FRSC 677 Prof Practices & Expt Testimony (3)
TRACK ELECTIVE/REQMNT (3)
TRACK ELECTIVE/REQMNT (3)
FRSZ 675L Forensic Serol & DNA Lab (1)
FRSC 570 Forensic Science Seminar (1)
FRSC 793 Directed Research in For Sci (1.5)

Total Credits – 10.5
Total Credits – 11.5

Notes:

1) †This course is typically offered during the fall, spring, and summer sessions and may be taken at that time. However, it is strongly recommended that students take this course during or prior to their Directed Research, where possible.

2) *The Patterns requirement can be fulfilled by either FRSC 661 Analysis of Pattern Evidence – or – FRSC 662 Firearm and Toolmark Identification. Forensic Biology and Chemistry track students are only required to take one of these courses (3 credits). However, students in the Physical Track are required to take both (6 credits).

3) ^Forensic Biology, Forensic Chemistry/Trace, and Forensic Physical Evidence track students are required to take FRSC 565 Scientific Crime Scene Investigation. However, students in the Forensic Chemistry/Drugs & Toxicology track may take this course or FRSC 663 Forensic Medicine, which is offered every other spring semester.

4) ‡FRSC 793 Directed Research in Forensic Science can only be completed after the first year (minimum 18 credits completed) and may be taken in any combination of semesters during the second year (summer, fall, spring).

5) Students may complete the last seminar (FRSC 570) credit during either semester of their 2nd year; however, a minimum of 3 must be completed by graduation and 2 credits must be completed in the first year. Seminars will be scheduled around all other courses offered.
FORENSIC BIOLOGY TRACK – (Example Schedule):

**1st Year**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td>FRSC 673 Forensic Microscopy (2)</td>
<td>FRSC 690 Research Writing (1)</td>
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<tr>
<td>FRSZ 673L Forensic Microscopy Lab (1)</td>
<td>STAT 543 Statistical Methods I* (3)</td>
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<tr>
<td>FRSC 675 Forensic Serology &amp; DNA (2)</td>
<td>FRSC 676 Advanced Forensic DNA Analysis (3)</td>
</tr>
<tr>
<td>FRSZ 675L Forensic Serology &amp; DNA Lab (1)</td>
<td>FRSC 570 Forensic Science Seminar (1)</td>
</tr>
<tr>
<td>FRSC 671 Instrumentation Forensic Chem (3)</td>
<td>FRSC 565 Scientific Crime Scene Invest (3)</td>
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<td>FRSC 570 Forensic Science Seminar (1)</td>
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**Total Credits - 10**

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<th>Spring</th>
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<tbody>
<tr>
<td>FRSC 690 Research Writing (1)</td>
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<tr>
<td>FRSC 676 Advanced Forensic DNA Analysis (3)</td>
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<tr>
<td>FRSC 565 Scientific Crime Scene Invest (3)</td>
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**Total Credits - 11**

**2nd Year**

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<tr>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td>FRSC 686 Emerging Mol. App in For Bio (3)</td>
<td>FRSC 677 Prof Practices &amp; Expt Testimony (3)</td>
</tr>
<tr>
<td>FRSC 670 For Evidence &amp; Criminal Procedure (3)</td>
<td>BIOL 516 Population Genetics (3)†</td>
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<tr>
<td>TRACK ELECTIVE (3) — or — Patterns requirement* (3)</td>
<td>TRACK ELECTIVE (3) — or — Patterns requirement* (3)</td>
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<tr>
<td>FRSC 793 Directed Research† (1.5)</td>
<td>FRSC 570 Forensic Science Seminar (1)</td>
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<td>FRSC 793 Directed Research in For Sci (1.5)</td>
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**Total Credits – 10.5**

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<tr>
<td>FRSC 677 Prof Practices &amp; Expt Testimony (3)</td>
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<tr>
<td>TRACK ELECTIVE (3) — or — Patterns requirement* (3)</td>
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<tr>
<td>FRSC 570 Forensic Science Seminar (1)</td>
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<tr>
<td>FRSC 793 Directed Research in For Sci (1.5)</td>
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</table>

**Total Credits – 11.5**

**Notes:**

- † This course is offered summer, fall, and spring semesters. However, this course is a prerequisite for BIOL 516 Population Genetics, which is only offered in the fall semester.
- In order to assure that all Forensic Biology students meet the current DNA Advisory Board Quality Assurance Standards for Forensic DNA Testing laboratories, students and advisors should assure that college courses in Biochemistry, Molecular Biology, and Genetics have been successfully completed. All other requirements are met by the core and the track-required specialty courses in this curriculum. If the student has not completed these course requirements, they should take those appropriate courses for their elective credits.
- At least one elective course must be a graduate-level molecular biology-related course, even if they had a similar undergraduate course.

**Suggested Electives – Forensic Biology Track:**

- BIOC 503 Biochemistry, Cell, & Molecular Biology (Fall focus: Biochemistry) (5)
- BIOC 504 Biochemistry, Cell, & Molecular Biology (Spring focus: Molecular Bio) (5)
- BIOL530/HGEN 501 Human Genetics (Fa) (3)
- BIOL 540 Molecular Genetics (Sp) (3)
- BIOL 693 Current Topics – Molecular Biology (Fa/Sp) (1)
- BNFO 507 Essentials of Molecular Biology (Sp) (2)
- FRSC 505 Forensic Entomology (Fa) (3)
- FRSC 510 Forensic Develop Osteology (3)
- FRSC 515 Adv. Forensic Anthropology (3)
- FRSC 566 Advanced Crime Scene Investigation (Sp) (3)
- FRSC 580 Applied Statistics for Forensic Science (3)
- FRSC 644 Forensic Toxicology (Sp) (3)
- FRSC 663 Forensic Medicine (even Sp) (3)
- FRSC 692 Forensic Science Independent Study (Fa/Sp) (1-3)
- FRSC 693 Current Topics in Forensic Science (1)
- FRSZ 792 Research Techniques
**FORENSIC CHEMISTRY/ DRUGS & TOXICOLOGY TRACK – (Example Schedule):**

1st Year  

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td>FRSC 673 Forensic Microscopy (2)</td>
<td>FRSC 670 For Evidence &amp; Criminal Procedure (3)</td>
</tr>
<tr>
<td>FRSZ 673L Forensic Microscopy Lab (1)</td>
<td>FRSC 672 Advanced Drug Analysis (3)</td>
</tr>
<tr>
<td>FRSC 675 Forensic Serology &amp; DNA (2)</td>
<td>FRSC 644 Forensic Toxicology (3)</td>
</tr>
<tr>
<td>FRSZ 675L Forensic Serology &amp; DNA Lab (1)</td>
<td>FRSC 570 Forensic Science Seminar (1)</td>
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<td>FRSC 671 Instrumentation Forensic Chem (3)</td>
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<td>FRSC 570 Forensic Science Seminar (1)</td>
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Total Credits - 10

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<tr>
<td>FRSC 671 Instrumentation Forensic Chem (3)</td>
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2nd Year  

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<th>Fall</th>
<th>Spring</th>
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<tbody>
<tr>
<td>Patterns requirement* (3)</td>
<td>FRSC 677 Prof Practices &amp; Expt Testimony (3)</td>
</tr>
<tr>
<td>TRACK ELECTIVE (3)</td>
<td>TRACK ELECTIVE (3)</td>
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<tr>
<td>STAT 543 Statistical Methods † (3)</td>
<td>FRSC 663 Forensic Medicine (3)</td>
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<tr>
<td>FRSC 793 Directed Research (1.5)</td>
<td>FRSC 570 Forensic Science Seminar (1)</td>
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Total Credits – 10.5

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<th>Spring</th>
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<tbody>
<tr>
<td>FRSC 570 Forensic Science Seminar (1)</td>
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<td>Total Credits – 11.5</td>
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Notes:  

- In order to assure that all Chemistry Track students are eligible for employment in chemistry related sections of private and/or public crime laboratories, it is strongly recommended that college coursework in Biochemistry, Physical Chemistry, Quantitative Analysis, and Instrumental Analysis have been successfully completed. If the student has not completed these course recommendations, they may be required to complete the courses provisionally, in addition to the required coursework shown here.
- At least one elective course must be a graduate-level chemistry course.
- † This course is offered summer, fall, and spring semesters.

Suggested Electives – Forensic Chem/ Drugs & Tox Track:

- PHIS 501 Mammalian Physiology (5)
- PHTX 536 Princ of Pharmy & Toxi (Sp) (5)
- PHTC 548 Drug Dependence (Fa) (3)
- CHEM 506 Intro to Spectro Methods (1.5)
- CHEM 630 Electroanalytical Chemistry (1.5)
- CHEM 631 Separation Science (1.5)
- CHEM 632 Chemometrics (1.5)
- CHEM 633 Mass Spectroscopy (1.5)
- CHEM 635 Spectrochemical Analysis (1.5)
- BIOC 503 Biochemistry, Cell, & Molecular Biology (Fall focus: Biochemistry) (5)
- FRSC 505 Forensic Entomology (Fa) (3)
- FRSC 510 Forensic Develop Osteology (3)
- FRSC 515 Adv. Forensic Anthropology (3)
- FRSC 566 Adv. Crime Scene Invest (Fa) (3)
- FRSC 580 Appl Statistics for For Sci (3)
- FRSC 607 Forensic Taphonomy (Su) (3)
- FRSC 681 Analysis of Fire Debris & Explosives (Fa) (3)
- FRSC 692 For Sci Indep Stud (Fa/Sp/Su) (1-3)
- FRSC 693 Current Top in Forensic Sci (1)
- FRSZ 792 Research Techniques
### FORENSIC CHEMISTRY/ TRACE ANALYSIS TRACK
*(Example Schedule)*

#### 1st Year

<table>
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<th>Fall</th>
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<tr>
<td>FRSC 673 Forensic Microscopy (2)</td>
<td>STAT 543 Statistical Methods I† (3) OR</td>
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<tr>
<td>FRSZ 673L Forensic Microscopy Lab (1)</td>
<td>FRSC 580 Appl. Stats for For Sci (3)</td>
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<tr>
<td>FRSC 675 Forensic Serology &amp; DNA (2)</td>
<td>FRSC 565 Scientific Crime Scene Invst (3)</td>
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<tr>
<td>FRSZ 675L Forensic Serology &amp; DNA Lab (1)</td>
<td>FRSC 682 For Analysis of Paints &amp; Polymers (3)</td>
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<tr>
<td>FRSC 671 Instrumentation Forensic Chem (3)</td>
<td>FRSC 590 Research Writing (1)</td>
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<td>FRSC 570 Forensic Science Seminar (1)</td>
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| Total Credits – 10                        | Total Credits – 10                          |

#### 2nd Year

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<tr>
<td>FRSC 670 For Evidence &amp; Criminal Procedure (3)</td>
<td>FRSC 681 Analysis Fire Debris &amp; Expl (3)</td>
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<tr>
<td>FRSC 565 Scientific Crime Scene Invst (3)</td>
<td>TRACK ELECTIVE (3)</td>
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<td>Patterns requirement (3)</td>
<td>TRACK ELECTIVE (3)</td>
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<tr>
<td>FRSC 793 Directed Research† (1.5)</td>
<td>FRSC 570 Forensic Science Seminar (1)</td>
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</table>

| Total Credits – 10.5                      | Total Credits – 11.5                        |

**Notes:**

- In order to assure that all Chemistry Track students are eligible for employment in chemistry-related sections of private and/or public crime laboratories, it is strongly recommended that college coursework in Physical Chemistry, Quantitative Analysis, and Instrumental Analysis have been successfully completed. If the student has not completed these course recommendations, they may be required to complete the courses provisionally, in addition to the required coursework shown here.
- At least one elective course must be a graduate-level chemistry course.
- †This course is offered summer, fall, and spring semesters.

- FRSC 520 Forensic Fire Investigation (Fa) (3)
- FRSC 566 Advanced Crime Scene Investigation (Fa) (3)
- FRSC 672 Advanced Drug Analysis (Sp) (3)
- FRSC/PHTX 644 Forensic Toxicology (Sp) (3)
- FRSC 510 Forensic Develop Osteology (3)
- FRSC 515 Adv. Forensic Anthropology (3)
- FRSC 607 Forensic Taphonomy (Su) (3)
- FRSC 692 For Sci Indep Stud (Fa/Sp/Su) (1-3)
- FRSC 693 Current Topics in Forensic Sci (1)
- FRSZ 792 Research Techniques
- CHEM 506 Intro to Spectroscopic Methods (1.5)
- CHEM 630 Electroanalytical Chemistry (1.5)
- CHEM 631 Separation Science (1.5)
- CHEM 632 Chemometrics (1.5)
- CHEM 633 Mass Spectroscopy (1.5)
- CHEM 634 Surface Science (1.5)
- CHEM 635 Spectrochemical Analysis (1.5)
FORENSIC PHYSICAL EVIDENCE TRACK – *(Example Schedule)*:

**1st Year**

<table>
<thead>
<tr>
<th>Fall</th>
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<tbody>
<tr>
<td>FRSC 673 Forensic Microscopy (2)</td>
<td>FRSC 565 Scientific Crime Scene Invst (3)</td>
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<tr>
<td>FRSZ 673L Forensic Microscopy Lab (1)</td>
<td>TRACK REQUIREMENT – CHOOSE ONE^ (3)</td>
</tr>
<tr>
<td>FRSC 675 Forensic Serology &amp; DNA (2)</td>
<td>STAT 543 Statistical Methods 1† (3) OR</td>
</tr>
<tr>
<td>FRSZ 675L Forensic Serology &amp; DNA Lab (1)</td>
<td>FRSC 580 Appl. Stats for For Sci (3)</td>
</tr>
<tr>
<td>FRSC 671 Instrumentation Forensic Chem (3)</td>
<td>FRSC 690 Research Writing (1)</td>
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<td>FRSC 570 Forensic Science Seminar (1)</td>
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Total Credits - 10

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<tr>
<th>2nd Year</th>
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<tbody>
<tr>
<td>Fall</td>
<td>Spring</td>
</tr>
<tr>
<td>FRSC 670 For Evidence &amp; Criminal Procedure (3)</td>
<td>FRSC 677 Prof Practices &amp; Expt Testimony (3)</td>
</tr>
<tr>
<td>TRACK REQUIREMENT – CHOOSE ONE^ (3)</td>
<td>Patterns requirement (3)^*</td>
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<td>TRACK ELECTIVE (3)</td>
<td>TRACK ELECTIVE (3)</td>
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<td>FRSC 793 Directed Research^ (1.5)</td>
<td>FRSC 570 Forensic Science Seminar (1)</td>
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<td>FRSC 793 Directed Research in For Sci (1.5)</td>
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</tbody>
</table>

Total Credits – 10.5

Total Credits – 11.5

Notes:

◊ This track is meant for students interested in careers that involve analysis of patterned evidence (i.e. Firearms, Fingerprints, Impression evidence, Questioned Documents, etc.) or other less common disciplines within forensic science. As such, it is a self-directed track and includes more electives.

◊ Electives for this track will depend on the student’s individual career goals and should be discussed and planned thoroughly with the academic advisor.

◊ Because of the purpose of this track, the curriculum could significantly overlap with the other traditional Biology/Chemistry tracks; as such, it is generally not recommended as a second track.

◊ *As shown, students in this track must take both FRSC 661 Analysis of Pattern Evidence AND FRSC 662 Firearm & Toolmark Identification.

◊ †This course is offered summer, fall, and spring semesters.

Suggested Electives – Physical Track:

- FRSC 520 Forensic Fire Investigation (Fa) (3)
- FRSC 566 Adv. Crime Scene Investi (Fa) (3)
- FRSC 672 Advanced Drug Analysis (Sp) (3)
- FRSC/PHTX 644 Forensic Toxicology (Sp) (3)
- FRSC 510 Forensic Develop Osteology (3)
- FRSC 515 Adv. Forensic Anthropology (3)
- FRSC 607 Forensic Taphonomy (Su) (3)
- FRSC 681 Analysis of Fire Debr/Explosives (Fa) (3)
- FRSC 682 For Anal of Paints/Polymers (Sp) (3)
- FRSC 644 Forensic Toxicology (Sp) (3)
- FRSC 663 Forensic Medicine (Sp) (3)
- FRSC 692 For Sci Indp Study (Fa/Sp/Su) (1-3)
- FRSC 693 Current Topics in Forensic Sci (1)
- CRJS 591 Topics in Criminal Justice (3)
- FRSZ 792 Research Techniques
Students should choose only one pattern course (FRSC 661 or FRSC 662), except for those students in the Physical Track.

Students may complete the last seminar (FRSC 570) credit during either semester of their 2nd year; however, a minimum of 3 must be completed with 2 credits in the first year. Seminars will be scheduled around all other Forensic Science courses offered.

The FRSC 793 Directed Research may be completed as suggested or alternatively, students may choose to begin this requirement during the summer semester between years. All students must complete the three credit requirement over at least two semesters (summer/fall or fall/spring). However, for more intense projects, students may choose to complete more than the minimum of 3 credits and/or over 3 or more semesters. Requests to begin the Directed Research early are directed to the Graduate Director for approval. Faculty advisors will work with each student to determine the appropriate number of credits and best term of enrollment for their specific projects after projects are identified.

Depending on how the courses are taken, it is possible that one or both semesters of the 2nd year require less than 9 credits for completion of the degree. Please note, however, that 9 credits are required for full-time student status. Students should check with their financial aid advisors to determine how many credits are required to qualify for and retain financial aid. Students needing to complete additional coursework to be full-time are encouraged to work with their advisor to select additional relevant coursework.
Course Description

Semester course; variable laboratory hours. 1-3 credits.

Students must apply to the program director for this directed research experience one semester in advance of enrollment. This is a capstone course in which students will conduct independent, original laboratory research in a forensic specialization area of interest, while also gaining practical experience in crime laboratory practices and methods. This laboratory research experience will culminate in a presentation of the project results at a campus seminar and/or professional conference, and a written technical report of publishable quality. This is a capstone course and may only be taken after successful completion of a minimum of 18 credit hours in the Forensic Science Master’s degree program or with permission from the instructor.

General Directed Study Information

Completion of Directed Research in Forensic Science is required for completion of the MS Degree in Forensic Science at Virginia Commonwealth University. Students should begin planning this experience by the end of the first semester of enrollment in the program. Students are encouraged to seek research opportunities either on-campus with faculty members or off-campus in accredited forensic laboratories. The Graduate Director, faculty advisors, and professional contacts of the department will assist in identifying and providing contact information for potential labs and mentors in geographical regions of interest to the student. The student will then be responsible for contacting individuals and laboratories of interest to inquire about research opportunities. The more quickly that the student begins working on this process and the more the student takes initiative in this process, the more likely they will have an ideal directed research project arranged that is in a region of interest to them and occurs in a timeframe that is most convenient.

As a part of the Directed Research experience, group meetings will be held each semester with the Graduate Director. The purpose of the meetings will be to assist the students with Directed Research planning, execution, and finalization of the process. In addition, general expectations will be reviewed. Meetings will be announced well in advance and attendance will be mandatory.

Questions regarding these policies should be directed to the Forensic Science Graduate Director and/or the VCU Forensic Science Department administrative office. Current contact information can be found on the Department’s website.
Credits:

- A minimum of three credits of FRSC 793 Directed Research in are required; a maximum of 6 credits will be accepted toward the 42 required credits for graduation.
- Students must achieve an overall GPA of 3.0 (“B”) in his/her graduate study at VCU in order to enroll in FRSC 793.
- Transfer credits from other institutions will not be applied towards the required directed research.
- Students may complete FRSC 793 research credits over multiple semesters by enrolling in 1, 1.5, 2, or 3 credits each semester. An initial plan of action should be outlined on the initial paperwork (Appendix 1 Checklist Form & Appendix 2 Request Form).
- Students may register for the number of credits that is deemed appropriate for the work involved during the given semester.
  - Students are encouraged to split FRSC 793 research credits over a minimum of 2 semesters.
  - Students who have completed all associated lab work and are left with only the technical report and oral defense to complete must register for a minimum of 1.5 credits during the semester of the oral defense.
  - Students completing off-campus research during the summer session must register for a minimum of 1.5 credits in the summer and 1.5 credits in the fall semester.
  - If additional credits are desired (beyond what was approved on the initial paperwork), a “FRSC 793 Request for Additional Credits” form (Appendix 3) must be submitted and approved.
- Selected FRSC 793 research projects must involve a minimum of 300 hours of supervised laboratory work for 3 credits. This work should encompass an independent research project. If additional credits are requested, another 100 hours of supervised laboratory work is required for each additional credit.
- Students must be registered for FRSC 793 credit during the semester in which they are completing the directed research (including lab work, oral defense, and technical report). Further, unless the student is a paid staff member of the host laboratory, all laboratory work must be completed during the semester of enrollment, i.e. laboratory work can begin no sooner than the first day of classes of the semester of enrollment and laboratory work must end by the last day of the exam period for the semester of enrollment.

Shadowing Experience:

In addition to the research component, students are encouraged to shadow an examiner in their discipline or section of interest; this is considered to be an essential part of a well-rounded directed research experience. Whenever possible, this shadowing should include observing how typical samples are received and processed through the laboratory, and how data is analyzed and reported. Additionally, students are also encouraged to view testimony of an examiner if/when possible.
Honorariums & Stipends:

An honorarium may be provided to research mentors/s from the Virginia Department of Forensic Science (VA-DFS). Full-time VCU faculty members are not eligible to receive this honorarium.

A stipend to cover laboratory expenses may be supplied to full-time VCU faculty members who sponsor & supervise on-campus directed research.

These expenses are not guaranteed and are subject to availability of departmental funds.

Note:
- VA-DFS mentors and VCU faculty will receive only one honorarium/stipend per project; the honorarium amount is not related to the total number of registered credits.
- No honorariums or stipends will be provided for directed research projects that are completed at other universities, public laboratories, or private companies.

Liability & Background Checks:

Directed research completed at forensic laboratories and/or agencies outside of VCU may require extensive application processes, confidentiality agreements, and/or background checks before students can begin working in the laboratory. Drug use policies & policies regarding personal and criminal history vary by agency and may be applied to incoming students. Background investigations for students can be lengthy, often requiring several months to 1 year to complete. Students are responsible for inquiring about these policies, planning ahead appropriately, and following all agency guidelines regarding these issues.

For the FRSC 793 directed research program, pay is not required and is provided entirely at the discretion of the laboratory. Given this, laboratories may consider liability or other legal issues when accepting either paid or unpaid students. All students who are placed in an off-campus non-VCU laboratory for credit (as a degree program requirement) are covered for acts of negligence and general liability under the Commonwealth of Virginia Risk Management Self-Insured coverage. Further, according to US labor laws, laboratories are not required to pay students as long as they are enrolled in a bona fide trainee program such as a university directed research program. For the entire VCU Department of Forensic Science Legal Statement regarding off-campus student research, see Appendix 4 of the FRSC 793 Directed Research Policies & Procedures Manual.
FRSC 692-Independent Study Guidelines and Procedures

FRSC 692 Independent Study Policies & Procedures

Course Description:

Semester course; variable hours. 1-3 credits. Maximum credit for all independent study is 6 credits. The amount of credit must be determined, and written permission of mentor and program director must be obtained prior to registration for this course. This course is designed to provide an opportunity for independent laboratory research in an area of forensic science or related scientific discipline. The products of this experience will be an oral presentation at a campus seminar and a written report.

General information:

- Students must have achieved an overall minimum overall GPA of 3.0 in his/her graduate study at VCU in order to enroll in this course.
- A maximum of six credits of independent study may be accepted towards the 42 credits required for the MS in Forensic Science degree.
- A minimum of four hours per week of supervised laboratory activity per credit hour is required.
  - Exceptions to the laboratory requirement may be allowed for some non-laboratory research projects. Exceptions to this will be reviewed on a case-by-case basis by the departmental graduate committee. This includes any request for substituting independent study credit for a required course in the curriculum.
- Failing to follow all policies or meet all requirements specified in this document, including deadlines, will result in the lowering of the final grade by one letter grade. Enforcement of this policy will be at the discretion of the Graduate Director after consultation with the independent study mentor.
- Many outside agencies and private companies, including VA DFS, require lengthy application processes and background checks before students can begin working in the laboratory. Further, some will also require lengthy review and approval of presentations and reports that are based on data acquired at that agency. In those agencies/companies, this is generally required prior to that data being discussed or presented. Students should be aware of and carefully follow all agency/company guidelines regarding these issues.
Frequently Asked Questions about Directed Research and Independent Studies

When is the best time to complete my Directed Research?
Most students begin their directed research projects during the summer semester between their first and second year or during the fall semester of their second year. Students may begin their research earlier (during their first year) upon approval by their faculty mentor and Graduate Director.

Who can serve as my mentor for the Directed Research?
You can begin to select your directed research mentor or supervisor once you have identified the specialty area in which you would like to complete your research. Some specialty areas frequently chosen include: Forensic biology (DNA), forensic toxicology, controlled substances analysis, firearms and toolmark analysis, trace evidence analysis, and latent fingerprint and impression evidence analysis. All directed research committees must include a faculty mentor and committees must be approved by the Graduate Director. If you request directed research at VA DFS, the mentor/supervisor will be approved by the section supervisor/chief, with the approval of the Director of Technical Services (DTS) and Graduate Director.

How do I find a Directed Research opportunity?
Students will be required to meet with the Graduate Director first semester to begin the planning process for the Directed Research. The Graduate Director, faculty advisors, and professional contacts of the department will assist in identifying and providing contact information for potential labs and mentors in geographical regions of interest to the student. The student will then be responsible for contacting individuals and laboratories of interest to inquire about research opportunities. The more quickly that the student begins working on this process and the more the student takes initiative in this process, the more likely they will have an ideal directed research project arranged that is in a region of interest to them and occurs in a timeframe that is most convenient.

How do I form my committee for the Directed Research?
The committee must include the research mentor, a VCU faculty member, and at least one additional forensic science professional familiar with the discipline of interest. If the research is performed off-campus, the faculty member must be a full-time faculty member and will serve as the faculty mentor. Generally, either the lab mentor or the faculty mentor will suggest potential individuals for the committee.

Does my Directed Research have to be completed at VA DFS?
Directed Research may be completed with VCU Forensic Science research faculty (on-campus), with other VCU department research faculty, at other academic institutions, or at other outside public or private forensic laboratories (including VA DFS). Directed research can be performed at any of the four VA DFS regional laboratories or any other outside laboratory, as approved by the Graduate Director.

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Directed Research and Independent Study (cont.)

Does summer research (Directed Research or Independent Study) require registration and summer tuition?
Yes. If a student is engaged in research for credit during the summer, the student must be registered in order to gain credit. Additional associated tuition will be billed to the student. To see current tuition costs, visit [http://www.enrollment.vcu.edu/accounting/tuition_fees/calculator.html](http://www.enrollment.vcu.edu/accounting/tuition_fees/calculator.html)

What is the difference between the Directed Research (FRSC 793) and the Independent study (FRSC 692)?
Both involve forensic science-related research, a written paper and an oral presentation. FRSC 692 is not required, but may be taken as an elective for students who want to gain additional research experience. The research experience for FRSC 692 can be validation, novel research, or a paper-based (literary or data analysis) project. Additionally, the program director encourages students to select a mentor and project for FRSC 793 based on their primary career choice of forensic science discipline (e.g. Biology, Drugs, Toxicology, Questioned Documents, Trace Analysis). However, FRSC 692 may be completed in an area of forensic science outside of the primary area of interest.

Advising

Academic advising is a key component to your graduate experience. Graduate students receive e-mail advisor notification the summer before they begin their studies. Graduate students are required to see their VCU faculty advisor at least once a semester. Registration holds are placed each semester in order to insure that this meeting occurs. In addition, students are encouraged to meet with their adviser to discuss opportunities both within the department and in the forensic science community.

Advisors' contact information:
Catherine Connon, Ph.D.; cmconnon@vcu.edu; (804) 828-4318; Temple Building, Rm. 3305C
Tracey Dawson Cruz, Ph.D.; tcdawson@vcu.edu; (804) 828-0642; 1015 Floyd Ave., Rm. 2011
Christopher Ehrhardt, Ph.D., cehrhardt@vcu.edu,(804) 828-3502, Temple Building.Rm. 3305A
Eric Hazelrigg, M.S.; ejhazelrigg@vcu.edu; (804) 828-0075; 1015 Floyd Ave., Rm. 2017
Marilyn Miller, Ed.D.; mtmiller@vcu.edu; (804) 828-0765; 1015 Floyd Ave. Rm. 3001A
Michelle Peace, Ph.D.; mrpeace@vcu.edu; (804) 827-8591; 1015 Floyd Ave., Rm. 2016
Tal Simmons, Ph.D.; tlsimmons@vcu.edu; (804) 828-3295; 1015 Floyd Ave., Rm. 2013
Baneshwar Singh, Ph.D.; bsingh@vcu.edu; (804) 828-9576; 1015 Floyd Ave., Rm. 2010
Sarah Williams, Ph.D.; sseashols@vcu.edu; (804) 827-8597; 1015 Floyd Ave., Rm. 2012
There are official university policies to address numerous complaint scenarios. VCU policies include:

- University Rules and Procedures
- Affirmative Action/Equal Opportunity
- Rights of Students Under the Family Educational Rights and Privacy Act (FERPA)
- VCU Honor System
- Grade Review Procedure
- Student Conduct
- University Guidelines on the Prohibition of Sexual Harassment
- Student Sexual Misconduct
- Policy Statement on Hazing
- Guidelines for Demonstrations on the Campuses
- Alcohol and Drugs
- AIDS
- Computer and Network Resources and Student E-mail

These policies are included in the VCU Resource Guide.

Formal procedures are available to students throughout the complaint process. However, with most situations, the student is encouraged to talk directly with the professor to see if there has been a misunderstanding. If that is not resolved to the student’s satisfaction, students are encouraged to meet with the Graduate Director or Chair of the Department. Should the complaint fail to be resolved at the departmental level, students are referred to the College of Humanities & Sciences Dean’s Office Director of Faculty, Staff & Student Affairs, Anne Stratton at amstratton@vcu.edu or (804) 828-1674.
Teaching Assistantships

The Department of Forensic Science has 9 teaching assistantships, usually staffed by continuing second year students and new first year students. Primary responsibilities include: prepping teaching laboratories, putting equipment and supplies away following laboratories, inventorying and ordering supplies, assisting with teaching undergraduate Forensic Science laboratories, grading papers, photocopying, and general course support for Forensic Science faculty. These assistantships include a stipend and tuition (housing, books, and other fees are not covered).

All students admitted to the Forensic Science Graduate program will be considered for open TA positions during the admissions review process. Successful applicants for the TA positions have chemistry and/or biological laboratory experience beyond standard course work (for example, working in a laboratory as an independent study, internship, or full or part-time laboratory job). In addition, preference will be given to applicants with some form of prior teaching experience and specifically, experience in the following: making solutions, organizing laboratory protocols and supplies, and maintaining laboratory inventory and purchasing lists. Lastly, potential TAs should have positive attitudes and be team-players, as the selected candidate will work within a group of established TAs and faculty to meet the needs of the Department. The students selected for the TA positions will be required to work an average of 20 hours/week. Students who are selected for open TA positions will be notified during the graduate admissions process.

Scholarships and Awards

The Department of Forensic Science’s Emily R. Murphy Graduate Scholarship in Forensic Science is awarded annually by merit to a first year Forensic Science graduate student who has performed exceptional recent service to the university or community. Interested and qualified first year graduate students should apply in January.

The Paul B. Ferrara Scholarship in Forensic Science is awarded annually to a second year Forensic Science graduate student who demonstrates significant research and service contributions to the field of forensic science as well as leadership experience or potential. Interested and qualified second year graduate students should apply in the December of their second year.

The Professional Development Award is presented to a second year graduate student who has an abstract accepted for presentation at AAFS and a record of exceptional performance in research that has the potential to impact the field of forensic science. Interested and qualified second year graduate students should apply in the December of their second year.

The department also acknowledges students for Academic Achievement, Service and Leadership and as Outstanding Graduate student at the departmental diploma ceremony. Students are encouraged to get involved!! Being involved in campus and especially in Departmental activities will improve the chances for consideration of above mentioned awards! If you are unsure of how to serve, stop by the Department’s main office or the office of the Graduate Director to inquire about opportunities.

Other funding opportunities exist through the VCU Graduate School Bulletin Board.
Virginia Commonwealth University recognizes that honesty, truth, and integrity are values central to its mission as an institution of higher education. Therefore, it must act to maintain these values, even to the point of separating from the University those who violate them. The VCU HONOR SYSTEM describes the responsibilities of students, faculty, and administration in upholding academic integrity, while at the same time respecting the rights of individuals to the due process offered by administrative hearings and appeals. Any persons enrolled in any course or program offered by VCU, and all persons supervising the learning of any student are responsible for acting in accordance with the provisions of this policy. A complete text is included in the VCU Resource Guide.

An integral part of the VCU HONOR SYSTEM is the Honor Pledge:

*On my honor, I have neither given nor received aid on this assignment.*

At the option of the instructor, work assigned for classes, directed research, and all other types of instruction offered at the University may be accomplished in either of two ways: (1) as "Pledged" work, for which the student will sign a pledge statement indicating that the work was completed independently, without giving or receiving assistance from another; or (2) as "Unpledged" work, which may be completed in collaboration with others as directed by the instructor and for which no pledge statement is required. All work is considered to be pledged unless the instructor specifies others.

The VCU HONOR SYSTEM gives definitions and illustrative examples of six acts which are violations of the policy: Cheating, Plagiarism, Facilitating Academic Dishonesty, Abuse of Academic Materials, Stealing, and Lying. There are also six penalties which may be imposed upon students who are found guilty of violations: Honor Probation, Assignment of Grades, Suspension, Expulsion, Revocation, and Other Relevant Sanctions.
American Academy of Forensic Sciences
AAFS
http://www.aafs.org

AAFS is a “professional society dedicated to the application of science to the law. Membership includes physicians, criminalists, toxicologists, attorneys, dentists, physical anthropologists, document examiners, engineering scientists, psychiatrists, educators, and others who practice and perform research in the many diverse fields relating to forensic science” (AAFS web page). This site provides Employment Opportunities, including position titles, qualifications, duties, salary ranges, and contact information. A Career Brochure offers detailed views of the forensic scientist’s role in the areas of Criminalistics, Engineering Sciences, Jurisprudence, Odontology, Pathology, Biology, Physical Anthropology, Behavioral Science, Questioned Documents, and Toxicology. Students are encouraged to join this association and attend the annual meeting.

Mid-Atlantic Association of Forensic Scientists
MAAFS
http://www.maafs.org/

MAAFS objectives are to “encourage the exchange and dissemination of ideas and information within the fields of recognized forensic sciences through improving contacts between persons and laboratories engaged in the forensic sciences; to stimulate research and the development of new and/or improved techniques; and to promote high standards of performance and facilitate professional acknowledgment of persons working in recognized forensic science disciplines” (MAAFS web page). This organization has a newsletter, workshops and conferences. Students are encouraged to join this association and attend the annual meeting.
Professional Associations (cont.)

**Society of Forensic Toxicologists, Inc. (SOFT)**

http://www.soft-tox.org/

SOFT is composed of practicing forensic toxicologists and those interested in the discipline for the purpose of promoting and developing forensic toxicology. Through its annual meetings, the Society provides a forum for the exchange of information and ideas among toxicology professionals. SOFT sponsored programs and technical publications constantly improve the forensic toxicologists' skills and knowledge. The Society fosters friendship and cooperation among toxicologists and advocates a high level of professionalism through certification and accreditation programs.

**American Society of Crime Laboratory Directors (ASCLD)**

http://www.ascld.org/

ASCLD “is dedicated to providing excellence in forensic science analysis through leadership in the management of forensic science. Our web site contains considerable information about the ASCLD organization, forensic science, job opportunities, and links to other organizations involved in forensics” (ASCLD web site).

**Graduate Student Association**

http://www.graduate.vcu.edu/life/association.html

The VCU Graduate Student Association sponsors a research symposium, faculty/student events and other opportunities for graduate students to network and enhance their graduate experience.

**VCU Forensic Science Student Club (FSSC)**

http://rampages.us/vcu4n6advise/2014/09/15/forensic-science-student-club/

The Forensic Science Student Club provides opportunities for students to learn about the different areas in the discipline. Each semester, workshops, seminars, and social events are offered. Graduate students are automatically included as members (free membership) and all are welcome to attend all functions. The executive board has a position for a graduate student representative; elections for this position are held each spring semester.
Forensic Science Collaboration Room
Forensic Science graduate students have access to the Department’s Collaboration Room located in Harris Hall South Room 3001. The room is available as a study space and break room and students are able to use the refrigerator, microwave, and coffee machine. The Collaboration Room can also be reserved for meetings by signing up on the calendar beside the door. To facilitate these meetings, projectors and laptops are available by request to the teaching assistants or office assistant. The office supply cabinet and copier, however, are for office use only.

VCU Resource Guide
The VCU Resource Guide lists services and policies at VCU. This is an important resource for all students and may be picked up at the Office of the Associate Dean of Student Affairs at 901 Floyd Avenue or access on-line at http://www.students.vcu.edu/

Academic Technology Information
Email Accounts may be created online from any web-connected computer by going to http://www.ts.vcu.edu/askit/email/eid/.

Blackboard Accounts use the same login and password as email accounts and are automatic when the email account is created. Once a student has a VCU email account, he or she can access the Blackboard system.

Computer Labs are available in Cabell Library and in the basement of Sanger Hall.

University Career Center
http://careers.vcu.edu/
University Student Commons, 907 Floyd Avenue, Room 143
The University Career Center offers career planning and job search assistance for students. Services offered include Career Connections, resume writing workshops, and job search strategy workshops. Jorge Piocuda works with Forensic Science students and can be reached at jepiocuda@vcu.edu.
VCU Resources (cont.)

VCU ID
http://www.vcucard.com/

Your VCU Card can be obtained on the day of the School of Graduate Studies’ Student Orientation or during the first week of classes. Bring a photo ID and a copy of your fall schedule to the VCU Card office (see website for VCU Card Office hours and location).

VCU e-mail
www.ts.vcu.edu/askit/email/eid/

Your VCU e-mail address is the university’s official form of communication. Students are reminded to read and respond to their email regularly.

Graduate School Classified
http://www.graduate.vcu.edu/life/classifieds.html

The Graduate School Classifieds is a resource for graduate students and members of the community to share information regarding apartments, roommates, and part-time and temporary jobs in and around the city of Richmond. To post a submission to the Graduate School Classifieds, contact the Graduate School with the details of your request.

VCU Alert
http://alert.vcu.edu/

Students are encouraged to bookmark this site and to sign up for the text message alerting system. In addition to vital information in the event of a campus emergency, the VCU alert site also provide inclement weather information and contact information for reporting electrical or mechanical failure, or a chemical or radiological threat. The department strongly encourages all students to sign up for the text message alert system and to report any suspicious activity immediately to the proper authorities.

Graduation Application
http://www.enrollment.vcu.edu/rar/graduation_instructions.html

Students need to apply for graduation the beginning of the semester in which they intend to graduate (see university calendar for the deadline). Students should go to the web address listed above for the graduation application pdf, guidelines and next steps.
VCU wants all of its students to remain safe on campus. You can help by being aware of your surroundings and reporting any suspicious activity immediately. The information below is from the VCU Alert website, at http://www.alert.vcu.edu. This site is a great resource for information about keeping safe and secure while on campus.

**What **TO DO** in an emergency:**

- Remain calm, use common sense and give assistance as needed.
- Call the VCU Police at (804) 828-1234 or the Richmond Police by dialing 911.
- Evacuate buildings immediately upon request of authorities, upon hearing an alarm, or when remaining inside is dangerous or life threatening.
- Know the location of at least two emergency exits close to your working/living areas.

**What **NOT TO DO** in an emergency:**

- In order to keep lines open, do not use the telephone except to report the emergency situation.
- Do not use elevators.
- Do not jeopardize your life and the lives of others by attempting to save property.

**Emergency Text Messaging:**

In addition, the department urges all of its students to sign up for the emergency text messaging service by visiting http://alert.vcu.edu/signup/index.php.

In addition to being secure while around campus, students are reminded to strictly follow the laboratory safety procedures put in place for the safety of themselves and other at all times. Following is an abbreviated list of important considerations for working in the laboratory.
LABORATORY SAFETY RULES

Wear approved eye protection in the laboratory at all times. This means eye covering which will protect against impact, splashes, and alternate light sources. The wearing of contact lenses, even under safety glasses, is strongly discouraged.

Perform no unauthorized or unsupervised experiments.

Do not remove any chemicals, equipment, or supplies from the laboratory.

Locate the fire extinguisher and safety shower before the first lab so that it can be quickly accessed if needed.

Eating and/or drinking in the laboratory is strictly prohibited. No smoking is permitted in any campus building. Do not taste anything or put any laboratory item to your mouth. Do not chew pens/pencils used in the laboratory. Any unknown chemicals should not be smelled or touched.

Note the odor of fumes but avoid breathing fumes of any kind.

Do not use mouth suction when filling pipettes with chemical reagents. Use a suction bulb.

Protective gear such as safety glasses, latex/nitrile gloves and lab coats must be worn at all times while in the lab, unless the instructor specifies otherwise. Latex and nitrile gloves will be provided by the instructors; however, it is the student’s responsibility to provide their own lab coat and safety goggles.

Confine long hair and loose clothing when in the laboratory. Closed-toed shoes must be worn (open-toed sandals are not permitted).

Never work in the laboratory alone. Students are not allowed to work in the laboratory without an instructor or TA present.

Use safety shields or screens whenever there is potential danger from an explosion.

Wash your hands immediately upon removing gloves, upon completion of lab, and/or should the hands become contaminated. After washing hands, clean the water taps. Never touch another part of your body with your hands before washing.

Chemical waste must be disposed of properly in accordance with university waste disposal procedures.
Lab Safety Considerations, cont.

All biological materials (blood, serum, urine) and contaminated paper and plastic products (Kimwipes, gloves, cotton balls, micropipette tips) must be disposed of in the biohazard waste container. Sharp objects (slides, pipet tips, disposable pipets, tubes, lancets) must be disposed of in the hard-sided red sharps container. Dispose of uncontaminated waste in a regular trash receptacle.

Contaminated items should be placed in appropriate waste containers.

Some courses or specific laboratory exercises may be held at the Virginia Department of Forensic Science, Central Laboratory, in downtown Richmond. Due to the nature of the evidence rules and chain-of-custody procedures, there will be additional safety rules when lab exercises are held at the VADFS site. When VCU students are working within VADFS lab space, they are expected to follow all additional VADFS safety policies and procedures which will be provided by the Instructor. Any students found in violation of VADFS policies will not be allowed to participate in future labs taught at the VADFS facility.
# Important VCU and DFS Phone Numbers

*All are area code 804*

<table>
<thead>
<tr>
<th>VCU Department of Forensic Science</th>
<th>828-8420</th>
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<tbody>
<tr>
<td><a href="mailto:fos@vcu.edu">fos@vcu.edu</a></td>
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<table>
<thead>
<tr>
<th>Forensic Science Chair &amp; Graduate Director</th>
<th>828-3295</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tal Simmons</td>
<td></td>
</tr>
<tr>
<td><a href="mailto:tlsimmons@vcu.edu">tlsimmons@vcu.edu</a></td>
<td></td>
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</table>

**Other Important Numbers:**

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<tr>
<th>Bookstore</th>
<th>828-1678</th>
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<tr>
<td>Campus Police</td>
<td>(Emergency) 828-1234</td>
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<td></td>
<td>(Non-Emergency) 828-1196</td>
</tr>
<tr>
<td>College of Humanities and Sciences</td>
<td>828-1674</td>
</tr>
<tr>
<td>Dining Services</td>
<td>828-1148</td>
</tr>
<tr>
<td>Escort Service</td>
<td>828-WALK</td>
</tr>
<tr>
<td>Financial Aid</td>
<td>828-6669</td>
</tr>
<tr>
<td>Graduate School</td>
<td>828-6916</td>
</tr>
<tr>
<td>Housing and Residence Education</td>
<td>828-7666</td>
</tr>
<tr>
<td>Inclement Weather Hotline</td>
<td>828-OPEN</td>
</tr>
<tr>
<td>Information, Academic and MCV Campuses</td>
<td>828-0100</td>
</tr>
<tr>
<td>Library, Academic Campus</td>
<td>828-1110</td>
</tr>
<tr>
<td>Off-Campus Housing</td>
<td>828-1981</td>
</tr>
<tr>
<td>Parking and Transportation</td>
<td>828-PARK</td>
</tr>
<tr>
<td>Records and Registration</td>
<td>828-1349</td>
</tr>
<tr>
<td>Services for Students with Disabilities</td>
<td>828-2253</td>
</tr>
<tr>
<td>Siegel Center</td>
<td>827-1000</td>
</tr>
<tr>
<td>Student Accounting</td>
<td>828-2228</td>
</tr>
<tr>
<td>Student Activities Center</td>
<td>828-3648</td>
</tr>
<tr>
<td>University Career Center, Haley Sims</td>
<td>828-1645</td>
</tr>
<tr>
<td>University Counseling Services</td>
<td>828-6200</td>
</tr>
<tr>
<td>University Student Commons &amp; Activities</td>
<td>828-1981</td>
</tr>
<tr>
<td>University Student Health Services, Academic Campus</td>
<td>828-8828</td>
</tr>
<tr>
<td>MCV Campus</td>
<td>828-9220</td>
</tr>
<tr>
<td>VCU Card Office</td>
<td>827-CARD</td>
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</table>
VCU is an equal opportunity/affirmative action university providing access to education and employment without regard to age, race, color, national origin, gender, religion, sexual orientation, veteran’s status, political affiliation or disability.