MARSHALL UNIVERSITY FORENSIC SCIENCE GRADUATE PROGRAM

FORENSIC SCIENCE

Marshall University Forensic Science Center
1401 Forensic Science Drive
Huntington, WV 25701-3628
www.marshall.edu/forensics
304-691-8931

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STUDENT HANDBOOK DISCLAIMER

This book is designed to acquaint you with the Marshall University Forensic Science Program along with the terms and conditions of your student status. It is NOT a student contract or a promise of specific treatment but a reference to inform and assist with general policies. Consult the Marshall University Website and Marshall University Graduate Catalog for official information.

Please refer to the following websites for additional information:

Marshall University Forensic Science Program	www.marshall.edu/forensics
Marshall University Forensic Science Center	forensics.marshall.edu
Marshall University Graduate College	www.marshall.edu/graduate
Marshall University Main Campus	www.marshall.edu

It is the intent of the Forensic Science Program to provide information important for the student's successful completion of a Master of Science degree at Marshall University. During orientation, a collection of documents or websites will be provided detailing various policies of Marshall University, the Graduate School, and the Forensic Science Program. To document our thoroughness in providing essential university and program information, we ask you place your initials before each of the items in the table of contents indicating you have either been provided a hard copy and/or instructions to access specific information. This signed document will be placed in your student file.

TABLE OF CONTENTS

MARSHALL UNIVERSITY FORENSIC SCIENCE PROGRAM
FACULTY AND STAFF DIRECTORY

Assignments	First	Last	Degree	Phone (304)	Contact
FSC 619, 627	Kelly	Beatty	MSFS	304-691-8953	kbeatty@marshall.edu MUFSC DNA Lab 110
Manager	Nadine	Borovicka (McCrady)	MSFS	304-691-8963	mccrady@marshall.edu MUFSC Program Office
FSC 609, 605	Josh	Brunty	MS	304-696-3028	josh.brunty@marshall.edu Prichard Hall 215
FSC 606, 615	David	Castle	BACJ	304-696-4428	dcastle@hpdwv.com Huntington PD Crime Scene Unit
FSC 665	Chris	Chiles	JD	304-526-8653	Chris.chiles@courtswv.gov Cabell County Court House
FSC 604, 629, 624	Jason	Chute	MSFS	304-691-8946	jchute@marshall.edu MUFSC DNA Lab
FSC 606	Steve	Compton	BACJ	304-696-4428	scompton@hpdwv.com Huntington PD Crime Scene Unit
Director, FSC 606, 632, 634, 610	Terry	Fenger	PhD	304-691-8960 Cell: 304-634-8405	fenger@marshall.edu MUFSC W200C
BSC 550	Philippe	Georgel	PhD	304-696-3965	georgel@marshall.edu Biotech Science Cntr: BBSC 241-P
FSC 624	Todd	Green	PhD	304-696-3531	green@marshall.edu Biotech Science Cntr: BBSC 301 C
FSC 624	Elaine	Hardman	PhD	304-696-7339	hardmanw@marshall.edu Biotech Science Cntr: BSC 336S
FSC 650 DNA 1 & 2	Laura	Kuyper	MSFS	304-691-8939	Kuyper1@marshall.edu MUFSC DNA Lab 105
FSC 617	Amanda	Hoffman	MSFS	304-691-8972	hoffman48@marshall.edu MUFSC DNA Lab 123
Admin Assistant	Tiffany	Hussell	MS	304-691-8964	crum26@marshall.edu MUFSC Program Office
FSC 624	Derrick	Kolling	PhD	304-696-2307	kolling@marshall.edu Science Bldg S403
FSC 624	William	McCumbee	PhD	304-696-7336	mccumbee@marshall.edu Biotech Science Cntr: BSC 535 N
FSC 608, 622, 623, 626, 628	Waugh	Lauren	PhD	304-690-8940	richards18@marshall.edu Fairfield Professional Bldg: 3rd Floor
FSC 608	Gary	Rankin	PhD	304-696-7313	rankin@marshall.edu Biotech Science Cntr: BSC 435 F
FSC 612, 618	Catherine	Rushton	MSFS	304-691-8968	rushton1@marshall.edu MUFSC W200H
FSC 610	Thomas	Rushton	MD	304-691-1095	rushton@marshall.edu MUSOM
FSC 624	Joe	Russo	MS	570-417-2739	russo8@marshall.edu MUFSC W200G
FSC 676	John	Sammons	MS	304-696-7241	sammons17@marshall.edu Prichard Hall 208
FSC 607, 603, 650 FT-TAP 1 & 2	Season	Seferyn	MSFS	304-691-8971	seferyn@marshall.edu MUFSC DNA Lab 110
FSC 624	Anne	Silvis	MS	412-654-7310	olshanski@marshall.edu BMS
Program Coordinator/ Academic Advisor, FSC 630, 650 Lab Management, 680, 624, 610	Pamela	Staton	PhD	304-691-8931 304-691-8962 Cell: 304-634-5263	staton1@marshall.edu MUFSC W200G
FSC 608	Monica	Valentovic	PhD	304-696-7317	valentov@marshall.edu Biotech Science Cntr: BSC 335G
FSC 604, 629, 624	Misty	Williamson (Marra)	MSFS	304-691-8952	marra2@marshall.edu MUFSC DNA Lab

FORENSIC SCIENCE CENTER DIRECTORY

(Updated 07/28/14)

Public Contact	Phone Number
MUFSC Main Line	304-691-8930
Academic Program Main Line	304-691-8931
Fax-CODIS	304-691-8928
Fax-Academic Program	304-691-8929
Crime Scene House	304-696-0000

Last	First	Extension	Email Address	Location/Specialty
Beatty	Kelly	18953	kbeatty@marshall.edu	DNA Analyst
Boggs	Bob	18973	robert.j.boggs@wvsp.gov	WVSP/Digital Forensics Unit
Borovicka	Nadine	18963	mccrady@marshall.edu	Academic Program Manager
Chute	Jason	18946	jchute@marshall.edu	DNA Laboratory/Technical Leader
Fannin	Carly	18954	fannin7@marshall.edu	DNA Analyst
Fenger	Terry	18960	fenger@marshall.edu	Professor/Director/Chair
Fry	Judy	18959	jafry@marshall.edu	Advance DNA Training Coordinator/ Admin Assistant Sr. CODIS Lab
Gibson	Wes	18967	gibsoj@marshall.edu	Digital Media Specialist
Harrah	Heather	18955	harrah5@marshall.edu	DNA Laboratory-Evidence Technician
Harrold	Lisa	18958	childre3@marshall.edu	Laboratory Administrative Assist. Sr.
Hinshaw	Ashlyn	18939	hinshaw4@marshall.edu	DNA Technician
Hoffman	Amanda	18972	hoffman48@marshall.edu	DNA Analyst
Hussell	Tiffany	18964	crum26@marshall.edu	Academic Program Admin Assistant
Kilkeary	Mackenzie	18944	kileary@live.marshall.edu	DNA Technician
Kuyper	Laura	18948	kuyper1@marshall.edu	DNA Analyst
Levstein	Ian	18966 C: 606-571-1745	levstein1@marshall.edu	Computer Operations Manager/ Security Officer
Marra	Misty	18952	marra2@marshall.edu	DNA Analyst
Michels	Melissa	18969	hall183@marshall.edu	Grant Program Analyst
Rushton	Catherine	18968 C: 304-633-2777	rushton1@marshall.edu	Comparative Science & Microscopy Instructor
Seferyn	Season	18971	seferyn@marshall.edu	DNA Analyst
Smith	Ted	18945	smith251@marshall.edu	Grant Special Project Manager
Staton	Pam	18962 C: 304-634-5263	staton1@marshall.edu	Professor/Academic Program Coordinator
Thomasson	Mary	18961	thomass2@marshall.edu	NIJ Liaison, Public Information Office Marketing/Business/Paternity
Waugh	Lauren	18940	richards18@marshall.edu	Asst Professor- Forensic Chemistry
Weece	Jan	18957	weece@marshall.edu	Grant Finance/Grant Compliance/ Facilities Officer

Facility	Extension	Facility	Extension
Annex Classroom (A115)	18936	**CODIS Processing Lab**	18943
Annex Classroom (A117)	18937	**Fairfield Chemistry Lab**	18951
Annex Conference Room	18933	**West Wing Classroom 1**	18934
Annex DNA Lab	18938	**West Wing Classroom 2**	18935
CODIS PCR Lab	18942	**West Wing Conf. Room**	18932
CODIS Prep Lab	18941		

EMERGENCY CALL # (MUPD): 304-696-4357

IMPORTANT MARSHALL UNIVERSITY CONTACTS AND DEPARTMENTS

Marshall University Information Technology Council - http://www.marshall.edu/wpmu/itc/policies-procedures/
Marshall University Website - www.marshall.edu
Forensic Science Academic Program Website - www.marshall.edu/forensics
Forensic Science Center Website - forensics.marshall.edu
MyMU - mymu.marshall.edu
MUONLINE / WebCT (Blackboard/Wimba) - www.marshall.edu/muonline
Computer Help Desk, School of Medicine - musom.marshall.edu/helpdesk
Parthenon, Student Newspaper - www.marshallparthenon.com
WMUL Radio Station - 304-696-6651 - www.marshall.edu/wmul
UpLate Student TV Show - www.youtube.com/marshalluplate
President's Office - Dr. Stephen Kopp, Old Main (OM) 216 - www.marshall.edu/president
Provost/Senior Vice President for Academic Affairs - Dr. Gayle Ormiston - www.marshall.edu/academic-affairs
Vice President for Research - Dr. John Maher - www.marshall.edu/murc
MUSOM Dean for Health Sciences- Dr. Robert Nerhood (interim) musom.marshall.edu
Dean of the Graduate College - Dr. Donna Spindel – www.marshall.edu/graduate
Academic Affairs - OM 110 - www.marshall.edu/academic-affairs
Alumni Affairs - Erickson Alumni Center, www.marshall.edu/alumni
Athletic Ticket Office - Cam Henderson Lobby - herdzone.com
Bookstore - Memorial Student Center (MSC) - www.marshall.bkstr.com
Bursar - OM 101 - www.marshall.edu/bursar
Career Services Center, 1681 5th Avenue - www.marshall.edu/career-services
Center for International Programs - OM 320 - www.marshall.edu/cip
Computing Services, Main Campus - Drinko Library 1st Floor - www.marshall.edu/ucs
Counseling Services- Prichard Hall Lobby South - www.marshall.edu/counseling
Disabled Student Services - Prichard Hall 117 - www.marshall.edu/disabled
Financial Assistance - OM 120 - www.marshall.edu/sfa
Fitness and Recreation Center - 5th Ave/20th Street - www.marshallcampusrec.com
Graduate College - OM 113 - www.marshall.edu/graduate
I.D. Office - MSC BW9 - www.marshall.edu/campusid
Legal Aid - MSC 2W23 - www.marshall.edu/student-legal-aid
Libraries - www.marshall.edu/library
Marshall Artist Series - Jomie Jazz Center - www.marshall.edu/muartser
Memorial Student Center - www.marshall.edu/msc
Multicultural Affairs - 111 OM - www.marshall.edu/mcip
MUPD, Public Safety - 1801 5th Avenue - www.marshall.edu/mupd
Parking Services - Office of Public Safety - www.marshall.edu/parking
Payroll - OM 205 - www.marshall.edu/accounting/Payroll
Printing Services - OM Basement 14 - www.marshall.edu/printing
Psychology Clinic - Harris Hall 449 - www.marshall.edu/psych
Registrar - OM 106A - www.marshall.edu/registrar
Student Activities - MSC 2W31 - www.marshall.edu/student-activities
Student Affairs - MSC 2W28 - www.marshall.edu/student-affairs
Student Government - MSC 2W24 - www.marshall.edu/sga
Student Health - Prichard Hall 136 – www.marshall.edu/student-affairs/studenthealth.htm
Student Health Walk-In Clinic - Cabell Huntington Hospital, MUMC 1st Floor – 304-696-1100
- 8:00-10:45am and 1:00-4:00pm Monday-Friday when classes are in session.

Theatre Box Office – Joan C. Edwards Performing Arts Center - www.marshall.edu/cofa/theatre
Women's Center - Prichard Hall 135 - www.marshall.edu/wcenter

ACADEMIC CALENDAR

https://www.marshall.edu/calendar/academic/fall2014.asp

Summer 2014 Semester
August 1, Friday, Deadline for Submitting AAFS Abstracts www.aafs.org
August 11, Monday, Noon Deadline for Submitting Final Grades

First Semester
August 18, Monday -- August 22, Friday Registration/Schedule Adjustment
August 20, Wednesday, 9 a.m. Move in day for freshmen
August 21, Thursday --- August 22, Friday Week of Welcome
August 24, Sunday, 9 a.m. Residence halls open for upperclassmen
August 25, Monday, 8 a.m. Classes begin
August 25, Monday -- August 29, Friday Late registration/schedule adjustment (add-drop)
August 29, Friday Last day to add classes
August 31, Saturday -- September 1, Monday University computer services unavailable
September 1, Monday Labor Day - University Closed
September 2, Tuesday "W" period begins
September 19, Friday December graduation applications due in dean's office
September 26, Friday Last Day to Drop 1st 8 Weeks Courses
October 6, Monday Thesis/dissertation final draft due in advisor's office
October 14, Tuesday Mid-Semester, 1st 8 weeks ends
October 15, Wednesday 2nd 8 weeks begins
October 20, Monday, 12:00 pm Freshmen/Sophomore midterm grades due
October 27, Monday Students should schedule appointments with advisors
to prepare for advance registration.
(Required for students who have mandatory advising holds)
October 31, Friday Last day to drop a full semester individual course
November 3, Monday Recommended date to apply for May graduation
November 3, Monday - December 5, Friday Complete withdrawals only from the university
November 10, Monday - November 21, Friday Advance registration for spring courses for currently enrolled students
November 14, Friday Last day to drop 2nd 8 weeks course
November 22, Saturday, Noon Residence halls close
November 24, Monday - November 29, Saturday Thanksgiving/Fall Break
classes dismissed
November 24 - Monday
New admits and readmits may register
November 27, Thursday - November 28, Friday Thanksgiving Holiday University closed
November 30, Sunday, 9 a.m. Residence halls open
December 1, Monday Classes resume
December 1, Monday -- December 6, Saturday Dead week
December 5, Friday Last day to completely withdraw from fall semester
December 6, Saturday Exam day, some common finals
December 8, Monday Exam day
December 9, Tuesday Exam day
December 10, Wednesday Study day - exams resume at 3:00 pm
December 11, Thursday Graduate theses, approved EDT uploaded to Proquest
December 11, Thursday Exam day
December 14, Sunday, Noon Residence halls close
December 15, Monday, Noon Grades due
December 22, Monday, 5PM University Closes
December 23, Tuesday - January 1, 2015, Thursday Winter break, University closed
December 29, Monday Student Service Offices Open 10:00 a.m. -- 4:00 p.m.
December 30, Tuesday Student Service Offices Open 10:00 a.m. -- 4:00 p.m.

Second Semester
January 2, 2015, Friday University reopens
January 5, Monday -- January 09, Friday Registration/Schedule adjustments
January 12, Monday Classes begin
January 12, Monday -- January 16, Friday Late registration/schedule adjustment (add-drop)
January 16, Friday Last day to add a class
January 19, Monday Martin Luther King, Jr. Holiday - University closed
January 20, Tuesday "W" period begins
February 6, Friday Applications for May graduation due in dean's office
February 13, Friday Last day to drop 1st eight weeks course
March 3, Tuesday Midterm, 1st eight weeks ends
March 4, Wednesday 2nd eight weeks courses begins
March 9, Monday, 12:00 pm Freshmen/Sophomore mid-term grades due

March 16, Monday -- March 21, Saturday Spring Break, Classes dismissed
March 23, Monday Classes resume
March 27, Friday Last day to drop an individual course
March 30, Monday -- May 1, Friday Complete withdrawal only from the university
March 30, Monday -- April 3, Friday Advance registration for currently enrolled students
April 6, Monday Recommended date to apply for December 2015 graduation
April 06, Monday Advance registration for summer sessions begin (Open to admitted/readmitted students)
April 10, Friday Last day to drop a 2nd eight weeks course
April 13, Monday -- April 24, Friday Advance registration for fall semester for currently enrolled students
April 14, Tuesday Assessment Day. Students receive a list of activities from their academic department or college
April 27, Monday Advance registration for fall semester begins (Open to admitted and readmitted students except first-time fall undergraduates)
April 27, Monday -- May 1, Friday "Dead Week"
May 1, Friday Last day of class
May 2, Saturday Exam day - Saturday classes (and some common finals)
May 4, Monday Exam Day
May 5, Tuesday Exam Day
May 6, Wednesday Study Day, exams resume at 3:00 pm
May 7, Thursday Exam Day
May 8, Friday Exam Day
May 9, Saturday, TBA Commencement
May 11, Monday Summer School begins
May 11, Monday -- August 14, Friday Summer School Sessions
May 12, Tuesday, 12:00 pm Grades due
May 23, Saturday -- May 25, Monday University Computer Services Unavailable
May 25, Monday Memorial Day Holiday University closed
July 3, Friday Independence Day Holiday observed University closed

ABOUT THE MASTER OF SCIENCE PROGRAM

Mission

It is the mission of the Marshall University Forensic Science Center and Graduate Program to provide quality forensic science education, advanced scientific analysis and innovative economic opportunity for the promotion of truth and justice in our community, state and nation.

Marshall University's Mission - www.marshall.edu/www/mission.asp

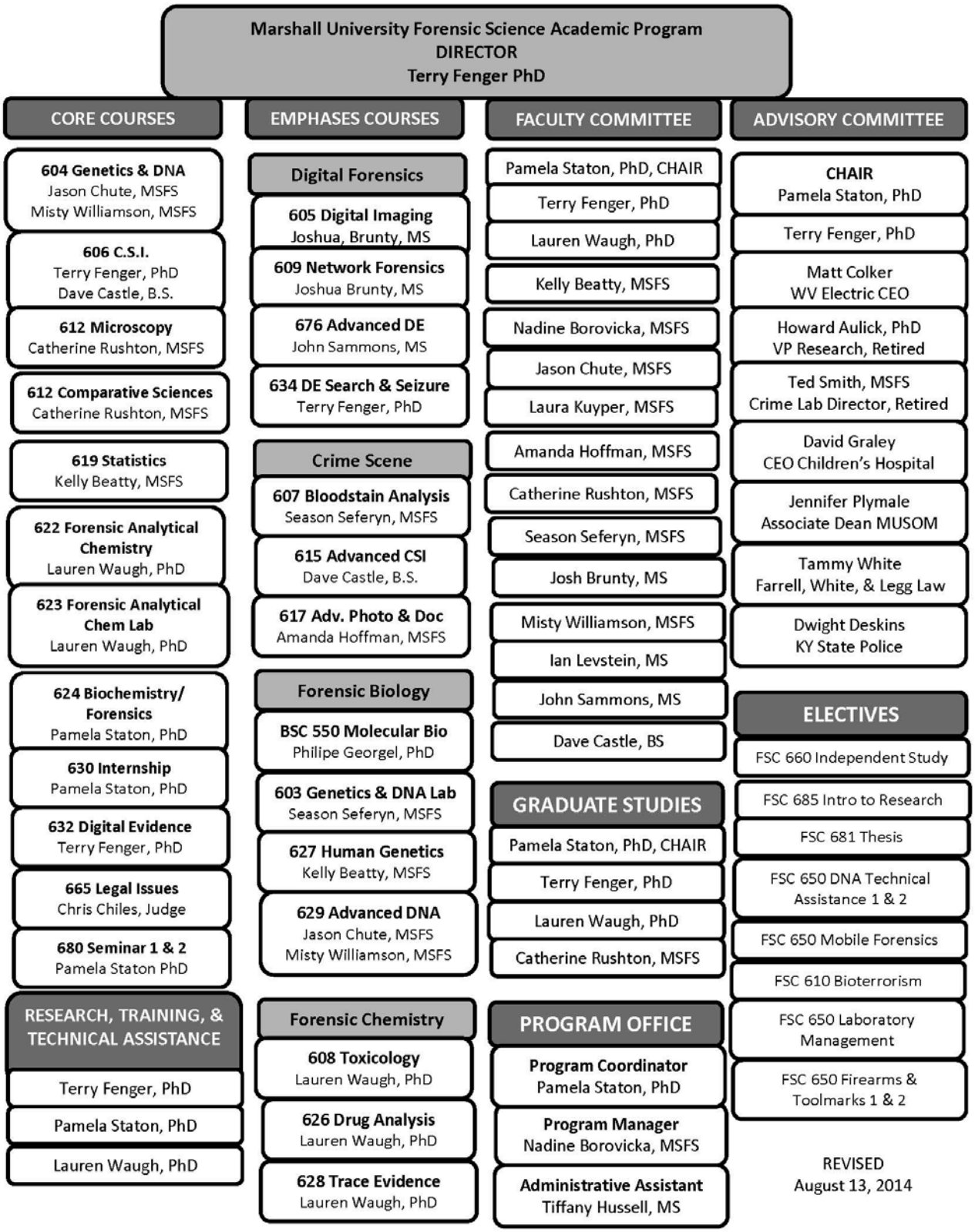
Vision

The Marshall University Forensic Science Graduate Program will demonstrate leadership in forensic science in order to:

- Provide affordable, high quality forensic science graduate education appropriate for the nation, state and the region.
- Provide forensic science services and resources to promote student learning, retention, and academic success.
- Foster faculty, staff, and student outreach through forensic science service activities.
- Provide a safe and secure work environment.
- Provide instruction in forensic science using appropriate and innovative modes of delivery.
- Provide forensic science education, training, and community services that serve society and the forensic science community.
- Promote forensic science student involvement in economic development activities that involve research, collaboration, and technological innovations.
- Model and promote the Marshall University Creed and MU Statement of Ethics, AAFS Good Forensic Science Practices, AAFS Code of Ethics, ABC Rules of Professional Conduct, and ASCLD Code of Ethics.
- Remain current in the field of forensic science while incorporating enhanced knowledge, skills, and abilities into the educational process.
- Improve instruction through the use of innovative teaching methods that promotes students learning and the development of critical thinking skills fundamental to becoming life-long learners.
- Contribute to the expansion of the forensic science body of knowledge through education, training, research and other services.
- Actively engage and mentor students in scholarly and creative endeavors.
- Regularly review the forensic science curriculum, degree, and programs offered, and recommend necessary additions and deletions to meet changing needs of the forensic science profession.
- Develop a positive, just, and equitable workplace for forensic science students and staff.
- Encourage and enhance student ability to use their knowledge, creativity, and critical thinking skills to make their communities better places in which to live.
- Secure funding to support forensic science scholarship and creative endeavors, faculty and staff development, and state-of-the-art classrooms and laboratory facilities.
- Facilitate the Forensic Science Program and Center’s achievement of its mission and vision; communicate the vision, mission, goals, achievements, and difficulties of the Forensic Science Center and Graduate Program in a clear, effective, and forthright manner to both internal and external constituencies.

Marshall University's Vision Statement - www.marshall.edu/www/vision.asp

MUFPS ORGANIZATIONAL CHART



MUFSC AFFLIATIONS

First and foremost, MUFSC is affiliated with Marshall University and the Joan C. Edwards School of Medicine (JCESOM). MUFSC's Master of Science Degree Program is coordinated through the Joan C. Edwards School of Medicine (financial affairs) and the Marshall University Graduate College (academic affairs).

Marshall University is a multi-campus public university providing innovative undergraduate and graduate education that contributes to the development of society and the individual. The University actively facilitates learning through the preservation, discovery, synthesis, and dissemination of knowledge.

At Marshall University, the Joan C. Edwards School of Medicine blends high-quality medical education and graduate education with a distinctive hands-on approach to meeting the health care needs of West Virginians and others who live in the nation's rural areas.

The National Institute of Justice (NIJ) is the research, development, and evaluation agency of the U.S. Department of Justice and is dedicated to researching crime control and justice issues. The NIJ provides objective, independent, evidence-based knowledge and tools to meet the challenges of crime and justice, particularly at the State and local levels.

ACCREDITATIONS AND ACCREDITED AFFILIATIONS

Accreditation

Accreditation is a process by which educational programs, universities, as well as laboratories, demonstrate that they have met standards set forth by national accrediting agencies. Accreditation is a voluntary process of external peer review in which an accrediting agency grants public recognition to a program of study, institution, or laboratory that meets established qualifications and standards set forth by the forensic science community and grant agencies.

Marshall University is North Central Association of Colleges and Schools (NCA) Accredited, a member institution of the West Virginia Higher Education Policy (WVHEPC).

The Master of Science in Forensic Science Degree Program is accredited by the American Academy of Forensic Science's (AAFS) Forensic Educational Program Accreditation Commission (FEPAC) in Forensic Science and Digital Forensics.

Marshall University Forensic Science Center's DNA Laboratory is accredited by Forensic Quality Services-International (FQS-I) as an ISO 17025 conformant testing laboratory for forensic casework and DNA databasing.

HEPATITIS B REQUIREMENTS

Students may be working with human body fluids during the course of their education at MUFSC. For their safety the student is required to be vaccinated and have immune status confirmed by completing a Hepatitis B Titer. If the student has been vaccinated and has a confirmed immune status these official records may be submitted to the program upon application or by October in the first term of into the program. For those who have not been vaccinated at the time of enrollment, information will be provided on how to receive the vaccination series and titer through the Cabell Huntington Health Department. If after receiving training in safe handling of blood and body fluids the student elect not to be vaccinated, it will be necessary that the student assume this responsibility by completing the Hepatitis B Declination form, available in the Student-Only section of our website http://www.marshall.edu/forensics/students/student-only.

Students must have documentation of participation in the Hepatitis B series or a signed copy of the Hepatitis B Declination Form on file in the Forensic Science Program Office by October of Term 1. The first injection must be completed by September of Term 1 of the program unless a declination is on file in the Academic Program Office.

The Disease - Hepatitis B is a viral infection caused by the Hepatitis B Virus (HBV) which causes death in 1-2% of hepatitis patients. Most people with Hepatitis B recover completely, but approximately 5-10% become chronic carriers of the virus. Most of these individuals have no symptoms but can continue to transmit the disease to others. Some may develop acute or chronic active hepatitis and cirrhosis. HBV also appears to be a causative factor in the development of liver cancer. Thus, immunization against Hepatitis B may prevent hepatitis and also reduce sickness and death from active hepatitis, cirrhosis, and liver cancer.

***The Vaccine* -** In general, the HBV vaccine is a non-infectious subunit viral vaccine derived from a Hepatitis B surface antigen (HBsAg) produced in yeast cells. The vaccine is free of association with human blood or blood products. Each lot of vaccine is tested for safety in both mice and guinea pigs, and also for sterility. There is no evidence that the vaccine has ever caused Hepatitis B. However, persons who have been infected with HBV prior to immunization may go on to develop clinical hepatitis in spite of immunization. Note that persons with immune system abnormalities have less response to the vaccine but over half of these individuals do develop protective antibodies.

In general, the full immunization series requires 3 doses of the vaccine over a six month period. The 2nd injection is received 1 month from the 1st injection while the 3rd injection is received 5 months from the 2nd injection. Every effort should be made to adhere to this schedule for optimal results. Seven months from the first injection a Hepatitis B titer is performed to confirm the individual's immune status. Once vaccination is started work can commence. However, if an exposure is sustained prior to completion of the series and/or without response to the vaccine a dose of Hepatitis B immune globulin within 7 days of exposure is recommended. The duration of immunity is unknown at this time.

Possible Vaccine Side Effect s- The HBV vaccine is generally well tolerated. No serious adverse reactions attributable to the vaccine have been reported during the course of clinical trials. A few persons experience tenderness and redness at the site of injection. A low grade fever may occur. The most frequent systemic complaints include fatigue, weakness, headache, and malaise.

The Hepatitis B Vaccine & Declination form is available in the Student-Only section of our website http://www.marshall.edu/forensics/students/student-only.

Cabell Huntington Health Department

www.cabellhealth.org. 703 7th Avenue, Huntington WV 25701 Phone: (304) 523-6483 Fax: (304) 523-6403

The local health department can administer the Hepatitis B Vaccine for a nominal price. Visit the website for clinic calendar or for more information.

TUITION AND FEES

Forensic Science Program Student Fees

For more information regarding tuition and fees please visit http://www.marshall.edu/graduate/costs-and-aid/base-tuition-rate-2012-2013. . The fees listed below are for the academic year 2014-2015 (Fall 2014 - Summer 2015). Fees and waivers are subject to change per academic year.

The Forensic Science Fee is a special fee designed to support the Forensic Science Program (see below). For more information, e-mail forensics@marshall.edu.

Forensic Science M.S. Program Tuition and Fees 2014-2015

(Full-Time/Per Semester) as of June 1, 2014

Description	Resident	Metro*	Non-Resident
System Capital Fee†	205.00	800.00	800.00
Educational and General Fee	900.00	1300.00	2200.00
Standard Auxiliary Fee	339.00	339.00	339.00
Forensic Science Fee	2470.00	3530.00	5455.00
Recreation Center Fee	199.00	199.00	199.00
Total	**$4113.00**	**$6168.00**	**$8993.00**

** Metro area includes the following counties:*

In Ohio: *Gallia, Jackson, Lawrence, Meigs, Pike and Scioto;*

In Kentucky: *Boyd, Carter, Elliot, Floyd, Greenup, Johnson, Lawrence, Martin, and Pike.*

***Tuition waivers are available for Educational/General Fees and System Capital Fees.*

For the latest cost of living and information on Huntington, WV, visit: www.city-data.com/city/Huntington-West-Virginia.html

Explanation of Tuition and Fees

For more information or to see due dates/schedules, please visit www.marshall.edu/bursar. Information below from MUBOG FA-10 Tuition and Fees Policy:

Payment of Fees - (WV State Code 18B-10-1)

All fees are due and payable by the student upon enrollment and registration for classes. Fee payments are permitted to be made in installments over the course of the academic term. All fees shall be paid prior to the awarding of course credit at the end of the academic term. Student fee deferred payment plans will be offered for fall and spring terms. All available financial aid for the term must be credited to the student's account prior to determining the amount available for deferral. After all financial aid is applied to the student's account, one-third of the balance of student fees, including room and board, must be paid prior to the start of classes. The remaining balance, including any interest or participation fees, must be paid prior to the end of the eighth week of classes.

System Capital Fee - Charges levied on all students to support debt service of system-wide bond issues; and charges levied on all students to support debt service, capital projects and campus maintenance and renewal for an institution's educational and general educational facilities

Educational and General Fee - Charges levied on all students of that class or category to support educational and general program services; and Optional charges levied for education and general services collected only from students using the service or from students for whom the services are made available. Educational and general expenditures are categorized as instruction, research, academic support, student services, institutional support, operation and maintenance of plant and scholarships and fellowships. Education and general expenditures do not include expenditures for auxiliary enterprises, hospitals or independent operations.

Standard Auxiliary Fee - Charges levied on all students to support auxiliary enterprises or optional charges levied only on students using the auxiliary service. Auxiliary fees include sales and service revenue from entities that exist

predominately to furnish goods or services to students, faculty or staff such as residence halls, faculty and staff housing, food services, intercollegiate athletics, student unions, bookstores, parking and other service centers

Special Equity Fee/ Special Institutional Capital Fees(Recreation Center, Forensic Science Fee, etc.) - In accordance with State 18B-10-15 the Governing Board may provide special services and special programs and may fix and collect special fees or charges to fund these services and/or programs. (This fee includes the auxiliary Recreation Center capital fees and can be broken down into a separate category for program-specific fees i.e. the Forensic Science Program Fee.)

Title IX Equity Fee - The fee shall be used solely for the purpose of complying with the equal opportunity athletic provisions of 20 U.S.C. 1681, et seq., known as Title IX of the Education Amendment of 1972.

Forensic Science Program Fee - Charges levied on forensic science students to support the high-tech nature of the curriculum; to support educational and general program services; supports instruction, research, academic support, student services, forensic science center support, operational and maintenance of facilities and administrative offices; scholarships, fellowships, travel awards; grounds maintenance, rent for faculty lab and office space, equipment and facilities maintenance, equipment replacement, gas, electric, water, internet service, phones and phone service, office equipment, office supplies, teaching and staff computers, laboratory and course supplies, salaries for staff faculty, extra-help or faculty; full- and part-time salaries; graduate assistantships, software, audio/visual and distance education equipment and software, access to programs for distance education, new furniture and replacement furniture, faculty enrichment, faculty travel, staff enrichment, staff travel, student enrichment, student travel, advertising/marketing, student recruitment, web-design services, printing, publications, and other activities directly related to the operation and support of the academic program.

Academic Common Market

Academic Common Market is a program through which students from states without a M.S. program in Forensic Science may qualify for the equivalent of in-state tuition. These are determined by the Southern Regional Education Board (www.sreb.org).

Students who wish to apply for the Academic Common Market program at Marshall University must follow these steps:

1. Provide to the Office of Academic Affairs, 110 Old Main, an original certification from the student's residency state agency approving Academic Common Market to a specific program at Marshall University. Visit SREB.org for state contacts.
2. Provide proof of admission to Marshall University and to the specified program. This should be delivered to the Office of Academic Affairs.
3. Provide proof of satisfactory progress within the specified program each semester. This can be done by completing the Academic Common Market Satisfactory Progress Report, available in the Registrar's Office, 106 Old Main, online at www.marshall.edu/academic-affairs prior to the due date for fee payments for any term of enrollment.

It is the student's responsibility to complete the appropriate ACM paperwork each term. The deadline for submission of all materials is the last day of late registration for the semester for **each term** of enrollment.

Qualifying Academic Common Market States (as of 07/25/2014):

- DELAWARE
- GEORGIA
- KENTUCKY
- LOUISIANA
- SOUTH CAROLINA
- TENNESSEE

Forms and additional information are available onhttp://www.marshall.edu/wpmu/forensics/students/student-only or www.sreb.org

FINANCIAL ASSISTANCE

Above and beyond Federal Perkins Student Loans and Federal Direct Subsidized and Unsubsidized Loans through the Student Financial Assistance, the following financial support is also available to qualified graduate students at Marshall University:

- Graduate Assistantships – Teacher of Record (GTA)
- Graduate Assistantships – Teacher Support (GTS)
- Graduate Assistantships – Teacher Grader (GTG)
- Graduate Assistantships –Research Assistant Exempt (GRA)
- Graduate Assistantships –Graduate Service Assistant (GSA)

Graduate Assistantships are non-tenured, part-time academic appointments that are available through a variety of departments and offices including academic departments, research units, administrative offices, and service units. There are three types of Graduate Assistants: Teaching Assistant; Research Assistant; Administrative Assistant.

Graduate Assistants working 10 hours/week, may receive $1208/semester plus a waiver of half or part of tuition (*these figures are for Academic Year 2014-2015*). Tuition is defined as System Capital Fees and Educational and General Fees. (Note: Some fees will be the student's responsibility).

Please note that the work time specified is an average time commitment per week. Your hiring unit will be sure to accommodate your academic requirements including class and examination schedules. Our priority is that you have the best possible opportunity to pursue your education. Work hours should not interfere with your course load or delay your progress toward earning your degree.

In order to be eligible for the maximum amount of financial assistance during the fall and spring semesters, graduate students must be enrolled for a minimum of 9 credit hours per semester. If enrolled for 7 credit hours per semester students are still eligible for Financial Assistance but at a prorated level.

The student must be able to document satisfactory academic progress (SAP) to qualify for financial aid and/or graduate assistantship. This requires that the student maintain a 3.0 Grade Point Average (GPA) and a 75% or higher course enrollment to completion ratio each term.

By an act of Congress, all graduate assistants or teaching assistants must submit an approved I-9 form. Payment of the GA stipend will not be authorized until this form is accepted by the Human Resources Office. Inquiries about graduate fellowships, work-study opportunities, loans, and other forms of financial assistance for graduate students should be directed to the Graduate College Office or to the Office of Student Financial Assistance, Marshall University, Huntington, WV, 25755. sfa@marshall.edu

Students enrolled in the Forensic Science Program have several opportunities to gain work experience as a graduate or teaching assistant. These awards fall into several categories based on the funding source. Regardless of the funding source, grad assistants or work studies are assigned to assist with courses (COS), research (BMS, FS), training (FS), and program administration (data collection). GTAs are program funded whereby students actually gain teaching, course management, and lab set-up experience. These assignments can be viewed as "employment and/or work experience" by potential employers as reflected on the student's and/or graduate's resume. In this respect, these assignments should be taken seriously as they play a vital role in developing a strong work-ethic among our students.

Each Graduate Assistant or Teaching Assistant is assigned to a Supervisor each semester. At the beginning of each semester, the student must complete a **Work Schedule & Assignments Form.** Students must also maintain a **Daily Activity Log.** Students should recognize these assignments as a "job" and themselves as "employees". In this respect, each student employee should adhere to appropriate work ethics including adhering to work schedules as well as notifying their respective supervisor when absences occur. An accurate record of attendance should be maintained on the Work Schedule. At the end of every semester, the student's Supervisor will submit to the Program Office the following documenting students' work performance:

1. Work Schedule and Updated Assignments

2. Daily Activity Log
3. Student Assessment of KSA's (Knowledge, Skills, & Abilities/Attitudes)

No student will be hired or rehired for a subsequent semester without the previous above documents on file in the Program Office.

Keep in mind that you are students first and academic success in the program may require some flexibility in work hours. For this reason, students should work with supervisors when extra study time is needed, by establishing a plan up-front to make up your work hours. It is suggested that supervisors have some off-site based projects that students may complete from home. This may include literature, website, or product searches; data analysis; etc. Students consistently arriving late for their assignment or absences without notification are unacceptable. If you do not have an assignment on a particular day, ask your supervisor if it is ok to study while getting credit for your GA hours.

The official Marshall University Graduate Assistant Handbook is located on www.marshall.edu/graduate/.

Graduate Assistant Tuition Waivers and Stipends

For the academic calendar year 2014-2015, subject to change each academic year.

Maximum Tuition Waiver Benefit per Semester

	Resident	Metro	Non-Resident
Full-Time (20 hr GA)	$1,105	$2,100	$3,000
Part-Time (10 hr GA)	$552.50	$1,050	$1,500

*For a student who is not enrolled full-time, budget the entire *half-time* amount; the student's tuition benefit will be pro-rated according to the number of credit hours enrolled.

Minimum Stipend per Semester

Status	Hours Registered	Work Hours	Salary
Full-Time	At least 9	20 hours/week | 320/semester	$2,416/semester
Part-Time	At least 9	10 hours/week | 160/semester	$1,208/semester

Satisfactory Academic Progress (SAP) Standards for Financial Assistance

To maintain financial assistance, Federal Regulations (General Provision CRF 668.1) require that a student be making satisfactory academic progress (SAP) toward the completion of his/her degree or program. Marshall University has adopted standards by which to monitor financial aid recipients' progress. Satisfactory academic progress will be questioned of graduate students only when their Grade Point Average drops below 3.0 or the completion ratio drops below 80%. Eligibility for financial aid when seeking a master's degree ceases with the completion of the first master's degree.

Withdrawing from classes after the drop/add period can have a negative effect on continued eligibility as it can serve to increase the time required to complete one's program. Repetitions will be dealt with according to the University's policy governing Grade Point Averages and will be included in classes registered for and competed. Students not meeting the above standards will receive notification from the Office of Financial Assistance as soon as such status is discovered.

Financial assistance recipients who are eligible for refunds of fees paid to Marshall University for tuition fees, room and/or board will receive a refund only after the assistance disbursed to the student for the payment period has been recovered. For additional information, refer to the section titled "Refund Procedure" in the on-line Graduate Catalog. Answers to questions regarding these and other concerns with financial assistance, including more specific information are available from the Office of Student Financial Assistance, phone 1-800-438-5390 or (304)-696-3162.

Forensic Science Program Satisfactory Academic Progress

In keeping with university standards, forensic science students must maintain a grade point average of 3.0 in all required coursework. Any student who receives more than 6 hours of "C" grades than a "C" in any one course will be

subject to dismissal from the program and/or will not be approved to graduate. Only 6 credits of C, and no grade below a C, will be counted toward fulfillment of the M.S. degree in required course work.

If the GPA falls below 3.0, the university will place the student on academic probation. Following notification of probation, the student will meet with his/her academic advisor to develop a plan to resolve any academic deficiency. In this report the deficiency is identified and a report prepared stating special instructions for restoring the GPA to 3.0 or higher within one year from the time of receipt. This report and plan of action, co-signed by the student and advisor, must be approved by the Dean of the Graduate College before the student can register for additional coursework. The form used for this purpose is the *Approval for Registration of Academic Ineligible Students* form, available on http://www.marshall.edu/graduate/forms/academicineligible.pdf.

If probationary status is not removed within 1 year, the Dean of the Graduate College, in consultation with the Graduate Studies Committee, will determine whether the student is retained or dismissed from the program. The maximum time frame for completing a Master Degree is seven (7) years from the date of completion of the earliest course applied toward the degree, including transferred credits.

Research Assistant- Exempt and Graduate Assistant- Exempt (GRA & GAE)

Graduate Assistants at the Forensic Science Center are generally assigned to individual faculty members to assist with research projects. The nature of the assistantship varies by discipline and can involve activities such as literature searches, library management, grant writing, data gathering, testing, and data analysis. **Graduate Administrative Assistantship (GAA)** provides service to the university in non-academic and non-research activities. Some GA positions are funded through grants and contracts (separate from federal GA financial assistance). **Graduate Research Assistantship (GRA)** directly participate in faculty/staff research projects where research may, but is not required to, contribute directly to the student's thesis or dissertation; or provide general support to the research mission of the academic unit or discipline. The amount of funding may vary with the individual grant or contract. Students wishing to apply for **Graduate Assistantships *through* the Forensic Science Program** should do the following prior to the beginning of each academic term:

Send a cover letter and resume which addresses the area of interest to Dr. Pamela Staton at staton1@marshall.edu. For more information contact the individuals listed below.

CODIS/Casework Lab	Ms. Heather Harrah	harrah5@marshall.edu
Forensic Chemistry	Dr. Lauren Waugh	richards18@marshall.edu
Digital Forensics	Dr. Terry Fenger	fenger@marshall.edu
Crime Scene House/CSI	Dr. Pamela Staton	staton1@marshall.edu
DNA Technical Assistants	Dr. Pamela Staton	staton1@marshall.edu
Parentage and Mortuary Projects	Ms. Season Seferyn	seferyn@marshall.edu
Firearms Asst	Ms. Season Seferyn	seferyn@marshall.edu

And other positions as assigned.

Once selected, the student must submit the following to the Program Office (staton1@marshall.edu) and to their Supervisor:

1. Work Schedule and Assignment Form

At the end of each semester, the Supervisor must submit, with the student's assistance, the following to the Program Office (staton1@marshall.edu):

1. Final Work Schedule
2. Daily Activities Log
3. Student Assessment of KSA's (Knowledge, Skills, & Abilities/Attitudes)

Graduate Work Study Assistantships (GAW)

Most students qualify for federal work study assistantships, which are based on need. To determine if the student qualifies, a FAFSA must be on file. All students, regardless of you pursuit of a graduate assistantship, must complete a FAFSA form to apply for financial assistance once a year. Additional information may be found on Marshall University's Student Financial Assistance website www.marshall.edu/sfa or via Doug Hennig, Financial Assistance Counselor, at 304-696-3158 or hennig@marshall.edu.

Teacher Grader or Teacher Support (GTG or GTS)

GTAs *directly participate* in the teaching mission of the academic unit as an instructor of record, lab instructor, discussion leader, lab or lecture assistant, or provide support for class instruction in the unit. TAs will have a supervising faculty member and will be required to undergo training/preparation.

TAs in the Forensic Science Program may be assigned (1) responsibility for teaching a self-contained class, or (2) responsibility for directing and/or teaching a subsection of a self-contained class, or (3) responsibility for directing and/or teaching a laboratory, or (4) responsibility for tutoring, or (5) responsibility as a class monitor in a distance learning setting.

TA's may perform course-related duties from the following menu:

- Course capture—transcription, capture, and development of course syllabus that meets Office of Assessment guidelines, capture of PowerPoint slides and other course handouts, capture of exams and keys, capture of instructor CV (for FEPAC and 5 year review) and Faculty Data Sheet.
- Tutoring—provide tutoring as needed especially prior to exams.
- Maintaining historic course enrollment information.
- Development and use of rubrics.
- Development of course and lecture-based objectives.
- 1-2 lectures or labs per term; include an ethics presentation with objectives.
- Grading, if approved.
- Mock crime scene, where applicable, and moot court exercise preparation

International Students

Marshall University welcomes the diversity that our international students bring to the campus community. International graduate students provide the Marshall University community with valuable perspectives and insights. Please note that international graduate assistants must obtain a social security number during their first semester of employment.

International students and their dependents are also required to have health insurance coverage and are responsible for purchasing health insurance upon arrival at the University.

Make sure you visit the Marshall University Center for International Programs, Old Main 320. MU International Student Orientation is mandatory. Please call 304-696-6265 for more information.

Tax Liability

The Internal Revenue Service (IRS) usually treats stipends paid to graduate assistants as taxable income and the University is obliged to withhold income taxes. Please check with your tax advisor, the Financial Aid Office and the IRS for details that apply to your specific circumstances.

Sick Leave, Vacation, and Health Services

Sick Leave - Graduate Assistants should make up any work hours that are missed because of illness and, to the extent that it is possible, should notify their supervisor of their absence. If you are a GTA and must miss a class because of illness please make every effort to notify the department before the time of the class meeting.

Vacation - The academic calendar details the days that classes are in session. All official vacation and holidays are listed here: www.marshall.edu/calendar/academic/. GA positions follow the work-time schedule of the hiring unit. Some hiring units may ask GAs to work during exam week. Be sure to check with your supervisor.

Health Services - The Student Health Service provides health care services for acute illnesses to students. Facilities are located at the Cabell-Huntington Hospital. For complete information: http://www.marshall.edu/shep/. Marshall University offers an optional Student Health Insurance Plan through Consolidated Health Plans. For complete Health Services information: https://consolidatedhealthplan.com/group/330/home

GA / WS Paperwork and Records

Tuition Benefit Form - *completed before semester begins.*
The tuition benefit amount varies by the hiring unit. The *GA Tuition Benefit* form, which records your tuition benefit, originates with the hiring unit. The amount of your tuition benefit should be reflected in your online statement (accessible through *myMU*), several weeks before the first day of class. Any remaining amounts after the tuition benefit has been applied will be your responsibility.

Work Study Time Sheets - *not applicable to GTA, GAA, or GTAs*
Work Study Assistants must submit weekly hours to their supervisor, or their department/unit administrative secretary designee, who will then submit the time sheet to the Payroll Office. This will initiate your paycheck. The time sheet should reflect total hours worked for each day of the week, but should not exceed your required weekly work hours. It is good practice to keep a copy of your time sheets. (See Work Study Time Sheet Procedures below)

THE FOLLOWING FORMS ARE AVAILABLE VIA http://www.marshall.edu/forensics/students/student-only

1. **Confidentiality Agreement** - All Academic Program GAs (or GA's that may view student information) are required to sign a confidentiality agreement in order to participate in the program.

2. **Work Schedule and Assignments** - This form is filled out the first week of each semester with the student's supervisor. Students are to fill in the estimated hours they will be working in-office/laboratory. The supervisor(s) will assign the student duties, tasks, and goals for the semester, which will act as the student's job description for the semester. This should be posted in the student's work space so both the student and supervisor can reference it as needed.

3. **Daily Work Activities Log** - The Daily Work Activities Log is filled out throughout the semester as a student completes tasks, duties, and assignments. Students are also to indicate whether the activities relate to their work study (WS) or graduate assistant (GA) hours. It is recommended that you fill out this form daily or weekly to best record daily activities. The Daily Work Activities Log is due no later than a week after final exams are complete.

4. **Knowledge, Skills, Attitudes, and Behaviors (KSA) Assessment** - The internship supervisor is asked to evaluate their GA or WS interns at the end of each semester. This form is due no later than two weeks after final exams are complete.

Work Study Time Sheet Procedures

Visit www.marshall.edu/wte for more information and training.
If a student is awarded a 10 hour/week Work Study GA position, completion of an electronic weekly time sheet is required. Twice a month, employees are required to submit the electronic time sheet, typically this falls on the university's paydays (the 15th and 30th or the 16th and 31st). When these days fall on a holiday or weekend, they will be need to be submitted the last business day prior to the deadline. Time sheets must be electronically submitted no later than 12pm of the last available day of the timesheet in order for you to get paid on time.

Students have a maximum total number of hours they can work per semester. This semester it is 160 hours for 10 hour assignments. When time sheets are turned in, we keep track of this information to ensure students do not go over this amount. Students do not have to work exactly 10 hours per week - you can use 12 hours one week, and the next only work 8, etc. The most important thing is that students do not go over 160 hours total for the semester. We do ask that you try to keep the hours consistent, because if it appears that the student is not working the 10 hours per week, they could lose their tuition waiver.

Please remember that the green time sheets should only have your hours from your ***Work Study*** NOT your GAA, GRA, or GTA position. GAA, GRA, and GTA positions do not require time sheets.

Steps for Marshall University Employees with Hourly Jobs:

Visit www.marshall.edu/wte for more information.

I. **Log In to MyMU & Select the Time Sheet**
   1. Log in to MyMU using your MUNet Account ID and password. The **MyMU** page will be displayed.

2. Click on the “Employee” tab.
3. Locate the new Banner Channel (section of the web page) titled "Time Reporting". Within that channel, find the job you want to enter time for (most employees will have only one) and click on the link for the pay period you want to update (you may only have 1 link to choose from).
4. The **Time and Leave Reporting** page will be displayed.

II. **Input your hours**

1. Locate the specific day you want to update (use the “Next” and “Previous” buttons to scroll through the days of the pay period or click Timesheet to see all days). Then click on the “Enter Hours” link directly below that day. The **Time In and Time Out** page will be displayed.
2. Leave the Shift field as 1. Fill in the Time In and Time Out field in HH:MM format. For example, 8 o’clock would be entered as 8:00, and 30 minutes past 12 would be entered as 12:30. Be sure to adjust the AM / PM drop down for each time as needed, it will default to AM.
3. Time must be entered in intervals of 15 minutes; you should follow the convention used in your department for rounding.
4. Lunch breaks and other non-working periods should be taken into consideration when completing the time sheet. For example, if you work from 8:00 AM till noon, take a 1 hour lunch break, then return to work at 1:00 PM and leave for the day at 3:00 PM, you would enter the hours for the day as follows:

Date:	Tuesday, Aug 03, 2011
Earnings Code:	Extra Help Hourly

Shift	Time In		Time Out		Total Hours
1	8:00	AM	12:00	PM	0
1	1:00	PM	3:00	PM	0

5. Click on "Save" - you must enter "Time In" and "Time Out" in order to save your time. The "Total Hours" field will be updated.
6. Repeat for all applicable days as necessary.
7. You may update time throughout the pay period by returning to MyMU and following the steps above.

III. **Submit Time**

1. Once all hours worked for the pay period have been entered, click on the "Submit" button. Your timesheet will be submitted to your supervisor for approval after re-entering your pin.
2. Please note the "Submit by" date and time on the **Time and Leave Reporting** page – you cannot enter time or submit your timesheet after this time.

IV. **Exit Time Reporting**

1. Click on “Exit” in upper right hand corner of the page and close your web browser.

V. **Problems?**

1. Go to www.marshall.edu/wte/help.html for troubleshooting ideas and additional information.

IMPORTANT: Always use the navigation provided by MyMU and Employee Self Service, instead of the Forward and Back buttons in Internet Explorer.

The Program Office has a very narrow window of time to obtain approvals and submit time sheets. Procedure:

1. Email a screen capture of your work hours to your Supervisor requesting their approval.
2. Forward your Supervisor’s approval to staton1@marshall.edu with a cc to mccrady@marshall.edu.

FORENSIC SCIENCE ACADEMIC PROGRAM CURRICULUM

About the Forensic Science Program www.marshall.edu/forensics

Marshall University's Master of Science in Forensic Science Degree Program is a nationally-recognized leader in forensic science education. Our students receive instruction using state-of-the-art equipment and facilities at the Marshall University Forensic Science Center preparing them for a bright future and exciting careers. The goal of the Master of Science Degree Program is to provide the forensic science community with graduates who possess the knowledge, skills, and abilities sought by crime labs and other law enforcement entities and to assist these agencies in reducing the requirement for employer-based, on-the-job training.

The FEPAC-accredited Forensic Science Master's Program provides a broad-based graduate level curriculum in forensic science. In addition to the core curriculum, the Marshall University Forensic Science Program offers four areas of emphasis: Crime Scene Investigation, Digital Forensics, DNA Analysis, and Forensic Chemistry. While **one area of emphasis is required,** students may complete up to four areas of emphasis during their standard five-semester/2-year course of study. Completing multiple areas of emphasis is contingent on maintaining good academic standing while enrolled in the program. Our program is unique in that it encourages a variety of specialties, unlike other graduate programs that require a pre-enrollment commitment to a single field of study. Both non-thesis and thesis options are available. Students selecting the thesis option should plan to expect to extend their program for 2 semesters beyond the standard 5 semester program.

A summer internship between the first and second year provides the student with real-world experience in a variety of specialty areas. Several on-site internships are offered in DNA Analysis, Forensic Chemistry, Digital Forensics, and CSI. For specialty areas not offered within MUFSC facilities, students have interned in crime laboratories across the state and nation. Also, the NIJ Technical Assistance Program offers a unique opportunity for students to serve as well-trained technical assistant in crime labs across the country in to meet their DNA validation, evaluation, and research goals.

On-site research and service forensic laboratories at the Marshall University Forensic Science Center (MUFSC) provide students opportunities to see the inner workings of a laboratory through shadowing professionals in one or more of the Center's laboratories. These include accredited laboratories providing CODIS databasing, parentage testing, and DNA casework, as well as forensic chemistry, digital forensics, and microscopy/comparative sciences.

The success of any program is measured by the success of its graduates. Graduates of the Forensic Science Program are well received by the forensic science community. Alumni span across the globe; many are employed by the FBI, ATF, DEA, AFDIL, Secret Service, State Department, state crime labs, private laboratories and agencies. Several graduates have utilized their Master of Science degree in Forensic Science as a stepping stone to pursue Ph.D., J.D., and M.D. degrees.

Core Curriculum

Each student is required to successfully complete the core curriculum which provides the student with a broad-based educational experience in forensic science.

COURSE NO.	CORE COURSE	CREDIT HRS
FSC 604	Genetics and DNA Technology	3
FSC 606	Crime Scene and Death Investigation	2
FSC 612	Forensic Microscopy and Trace Analysis	2
FSC 618	Forensic Comparative Science	2
FSC 622	Forensic Analytical Chemistry	3
FSC 623	Forensic Analytical Chemistry Lab	1
FSC 624	Biochemistry	4
FSC 630	Forensic Internship	5
FSC 632	Foundation and Fundamentals of Digital Evidence	3
FSC 665	Legal Issues in Forensic Science	3

FSC 680	Forensic Science Seminar: Term 1	1
FSC 680	Forensic Science Seminar: Term 2	1
FSC 680	Forensic Science Seminar: Term 4	1
FSC 680	Forensic Science Seminar: Term 5	1
FSC 619	Forensic Science Statistics	3
	FSC Elective or Research Thesis	3
Total		**38**

Multiple Areas of Emphasis

The Forensic Science Program offers four areas of emphasis that students may complete to enhance the core curriculum. The student is required to complete at least one area of emphasis but may complete up to four within the 5 semester course of study. Completing multiple areas of emphasis is contingent on maintaining good academic standing while enrolled in the program. Students may choose from the following four Areas of Emphasis: Crime Scene Investigation, Digital Forensics, DNA Analysis, and Forensic Chemistry.

The Program Advisor approves a student's eligibility to pursue multiple areas of emphasis based on the following criteria; the student must:

- Maintain a cumulative GPA of 3.0 or higher
- Demonstrate overall good academic standing, i.e., no current probationary status, not more than two C's, and no grades of less than C in required courses
- Be approved by the Graduate College Dean to exceed 12 credit hours per term, if applicable*
- Be approved by the Financial Aid Office to exceed the 54 credit hour limit, if applicable

*Students seeking to register for more than 12 credit hours in any given semester must complete the **Request for Overload Form** found on our website (www.marshall.edu/forensics) prior to registration. Current students please visit the Student-Only section and use your password to gain access. This completed form should be sent to staton1@marshall.edu to gain overload approval through the Graduate College.

Crime Scene Investigation Emphasis

The Crime Scene Investigation emphasis provides students with the tools and hands-on experience to excel and become leaders in their field. The Forensic Science Program has its own Crime Scene House that allows students to obtain real-world experience and training through the completion of mock crime scene exercises.

Emphasis in Crime Scene Investigation		
FSC 607	Bloodstain Pattern Analysis	3
FSC 616	Advanced Crime Scene Investigation	3
FSC 617	Advanced Photography and Documentation	3
Emphasis Credit Hours		**9**
Total *(Including CORE Courses)*		**47***

**For one area of emphasis (44 for more than one area of emphasis)*

Digital Forensics Emphasis

Computers and other digital devices hold a wealth of information including text, digital images, audio and video which can serve as key evidence for solving crimes. Forensic software programs can be used to image digital storage media and the images can be analyzed using a variety of investigative software programs. Cell phone forensics is an area that is emphasized in the forensic science courses as well as investigation of computers and gaming devices. The opportunity for students to participate in hands-on experiences with investigative tools allows students to participate in mock investigations in preparation for careers in this exciting discipline.

Emphasis in Computer Forensics		
FSC 605	Forensic Digital Imaging	3
FSC 609	Network Forensics	3
FSC 676	Advanced Digital Evidence Detection and Recovery	2
FSC 634	Digital Evidence Search and Seizure	3

Emphasis Credit Hours	**11**
Total *(Including CORE Courses)*	**49***

**For one area of emphasis*

DNA Analysis Emphasis

The Marshall University Forensic Science Center is home to the academic program as well as a service-oriented DNA laboratory. The Combined DNA Indexing System (CODIS) for West Virginia is a secure facility that uses state-of-the-art technology. MU DNA Lab faculty and staff serve as instructors and supervisors for various DNA-based courses while providing select students with real-world experience, training, and exposure to the inner workings of a forensic DNA laboratory. The DNA emphasis exceeds the DNA Advisory Board standards by requiring a total of 12 graduate level credit hours addressing the DNA guidelines.

Students interested in working in Forensic DNA Laboratories should be aware of specific personnel requirements listed in: 1) U.S. Department of Justice; Federal Bureau of Investigation; Quality Assurance Standards for Convicted Offender DNA Databasing Laboratories and 2) Quality Assurance Standards for Forensic DNA Testing Laboratories (please see page 74 for these requirements).

Required for Emphasis in DNA Analysis		
FSC 603	Genetics and DNA Laboratory	1
BSC 550	Molecular Biology	3
FSC 627	Human Genetics	2
FSC 629	Advanced DNA Technologies	2
Emphasis Credit Hours		**8**
Total *(Including CORE Courses)*		**46***

**For one area of emphasis*

Forensic Chemistry Emphasis

Students pursuing careers in forensic drug analysis, toxicology, and trace evidence will benefit from the completion of the Forensic Chemistry emphasis. As some agencies may require 30 or more hours of chemistry coursework, the Forensic Chemistry emphasis provides additional education and hands-on training to meet these federal and state guidelines.

Emphasis in Forensic Chemistry		
FSC 608	Forensic Toxicology	3
FSC 626	Forensic Drug Analysis	2
FSC 628	Chemical Analysis of Trace Evidence	2
Emphasis Credit Hours		**7**
Total *(Including CORE Courses)*		**45***

Recommended Elective Courses

Electives must be approved by your advisor.

Course No.	Recommended Electives	Credit Hours
FSC 610	Bioterrorism	3
FSC 650	Forensic Laboratory Management	2
FSC 681	Thesis	1-6
FSC 685	Introduction to Research	1-6
BMS 670	Basic Methods in Molecular Cloning	2
PMC 610	Introduction to Pharmacology	3
FSC 650	Firearms TAP	3
	Any Foreign Language Course (101+)	3
	Approved Elective	3

NIJ Technical Assistance Program (TAP)

The optional MU Technical Assistance Program (TAP) offers a unique opportunity for students to serve as a well-trained technical assistant to crime labs across the country in meeting their DNA validation research goals. Once selected, the student also enrolls in the accelerated Technical Assistance Program in preparation for their host-laboratory assignment. For more information, please visit http://www.marshall.edu/forensics/tap.

Optional Courses for DNA Analysis		
FSC 650	Technical Assistance I Fall/Term I	2
FSC 650	Technical Assistance II Spring/Term II	2

Research Project

Each student is required to successfully complete an independent research project. Research is conducted in an environment conducive to scholarly inquiry and in such a way for faculty and students to contribute to the body of knowledge and professional practice of forensic science. The research project shall culminate in a thesis or written report of publishable quality. Written guidelines for the format of thesis or report are provided. In addition, the results of the work are presented orally in a public forum for evaluation by a committee. This committee is made up of three appropriately qualified professionals that may include faculty, forensic practitioners and other members of the forensic science community with specialized knowledge and skills. The chair of the committee is a full-time MUFS faculty member who serves as the student's MU Topic Advisor. At least one member of the committee must be external to the MU Forensic Science Program.

FSC 630 Internship Information

Forensic Science students are required to register for Internship (FSC 630) in the summer term of their first year. Internship consists of a minimum 10-week term to include 32 hours/week spent with an approved forensic related agency or laboratory. A list of past internship sponsors is available as a source of information for future interns. While this list may be helpful, it is certainly not exhaustive. Upon entry into the Forensic Science Program, students should begin the process of identifying an agency/facility to sponsor their forensic science internship. For obvious security reasons, the student should be aware that forensic internship agencies may require completion of lengthy forms, background checks, submission to polygraphs, etc. all of which may take months for processing and approval.

Former students have acquired internships outside the State of West Virginia to make themselves known to an agency where they may desire employment following graduation or one that allows them to return to their home town or state. Other out-of-state internships have been sought when the desired forensic science specialty was not available within WV. For those students securing internships with West Virginia-based law enforcement agencies, testing laboratories, or other state-related forensic establishments, a stipend may be awarded depending on Program funding availability.

Paid internships may be available within the MU Forensic Science Center in areas such as the Forensic DNA, Digital Forensics, CSI, and Forensic Chemistry.

Students should keep in mind that they are responsible for making internship contacts, entering into internship contracts, successful completion of polygraphs and background check, and any financial responsibility associated with their internship. During their internship students are required to maintain a Daily Activities Log, Attendance/Punctuality Record, Detailed Data Collection Notebook or file, and complete a research-based project and research paper of publishable qualities.

Please refer to the FSC 630 Internship Syllabus for specific requirements. For grading purposes, students are required to submit a 1) 10-page research paper (double-spaced) in scientific format (not including charts and graphs), 2) PowerPoint slides of their Research Project, and 3) Poster of their Research Project. No grades will be issued until the following materials are received.

Required Internship Materials include the following:

- Cover sheet with the following:
    - Intern's Name
    - Name of Research Committee Members and Internship Agency
    - Mailing address, telephone number, and Email address of each
    - Internship Supervisor's name, title, telephone and email address
    - Inclusive dates of internship

- **Internship Agreement & Research Proposal**: Due by May 1, this document must be prepared in conjunction with the student's internship agency and signed by each research committee member. One reviewer is the MU Topic Advisor. One of two other reviewers must be external to the MU Forensic Science Program.
- **Research Paper (Final Submission):** Title and written summary of internship experience (10 page report) written in scientific format, e.g. title, abstract, introduction/purpose, material and methods, findings/data, discussion, conclusion, and references. A **Research Paper Rubric** must be completed by the 3 designated reviewers.
- **Attendance and Punctuality Form:** The intern's attendance must be documented and signed as approved by their primary laboratory supervisor. (Note: Please instruct supervisor to submit this to the Academic Program Staff no later than the final day of the internship.)
- A copy of your **Daily Activities Log** (Note: Please instruct supervisor to submit this to the Academic Program Staff no later than the final day of the internship.)
- A copy of your internship **Intern KSA** signed, or submitted by, your supervisor. (Note: Please instruct supervisor to submit this to the Academic Program Staff no later than the final day of the internship.)
- A copy of **Intern's Evaluation of the Internship Experience** (Note: Please send this to the Academic Program Staff no later than the final day of internship.)
- A copy of the intern's well-developed **Research Project PowerPoint Slides** and **Research Poster** (DRAFT). (Note: Please send this Academic Program Staff no later than the final day of internship.)
- **Seminar Announcement**
- **AAFS Abstract and Confirmation.** The abstract must include title, acknowledgements, abstract, and key words.

The above materials must be submitted to the Academic Program on the last day of finals Summer Term 1 as stated in the Marshall University Academic Calendar, available on www.marshall.edu/calendar/academic/ Refer to FSC 630 course syllabus for official information.

Internship Appreciation Packet
Each student will assist in preparing an "Internship Appreciation Packet" to be sent to their sponsoring agency prior to graduation. This packet will contain: a) a personal thank you note from the intern, b) copy of the intern's final poster, c) copy of the intern's final research paper, d) copy of the intern's final PowerPoint slides, and e) letter from the Academic Program.

Note: Summer Term 1 consists of a 12-week session. Forensic science internship consists of a minimum of 10 weeks at 32-hr/week to be spent in an approved forensic science laboratory. It is the responsibility of each student to schedule their internship within this time frame. The two remaining weeks of internship are provided for students to gain additional practice or for relocation for those participating in internships at some distance from the Forensic Science Center.

FSC 680 Seminar Information

Students are required to register for FSC 680 Seminar every term of their enrollment except for summer term. Each student will present two seminars. First-year students present a 20 minute Lay Audience PowerPoint presentation in the Spring Term of their first year on an approved forensic science topic designed for a diverse audience of forensic science-related professionals which may include law enforcement officials or legal professionals. Second-year students present a 50 minute Professional Audience PowerPoint presentation in the Fall Term of their second year on their approved research topic which is designed for a specialized professional audience.

Students must submit biographical sketch, title, abstract, and references to their designated faculty member (MU Topic Advisor) for pre-approval. Once pre-approved, this information is sent to the Seminar Instructor via email. Final versions of title, abstract, and references are due to the Seminar Instructor at a time TBA which allows for timely notification of attendees. No fewer than 3 peer-reviewed references are required from current scientific and/or forensic science literature published within the past 5 years.

Designated Faculty (MU Topic Advisors) for Seminar Topic Pre-Approval include:

Lay Talk MU Topic Advisors-

- Dr. Fenger: Crime Scene and Digital Forensics

- Dr. Waugh: Forensic Chemistry including Drug, Toxicology, and Trace
- Dr. Staton: DNA
- Mrs. Rushton: Comparative, Microscopy and Trace
- Mr. Levstein: Digital Forensics
- Mr. Chute, Ms. Williamson, Ms. Beatty, Ms. Seferyn, Ms. Kuyper: DNA & Statistics
- Ms. Rushton, Ms. Hoffman, Ms. Seferyn: Crime Scene Investigation

Research MU Topic Advisors –

- Dr. Fenger
- Dr. Staton
- Dr. Waugh

Presentation dates are provided in the Seminar syllabus. All changes in the seminar schedule must be approved by the Seminar Instructor. Seminar dress and appearance should be professional. Presentations are formally evaluated by students, faculty, and special guests with the results used for grading as well as for providing feedback to student presenters for future improvement. Within one week of the presentation, student presenters are required to complete a self-evaluation after reviewing their taped presentation. Student attendance is mandatory for all regularly scheduled and special seminars.

Seminar Goal: Enhancing Presentation Skills

TERM 1: Observe 2nd-year slide presentations and seminar format; discuss spring topic with advisor and obtain required approval to proceed.

TERM 2: Prepare and present lay talk, review class/faculty evaluations and self-evaluation, observe and evaluate 2nd year poster presentations, incorporate self-improvements, lend expertise to classmates.

TERM 3: Prepare and submit research slides and draft poster, apply for AAFS or other conference presentations.

TERM 4: Present research seminar slides, review class/faculty evaluations and self-evaluation, incorporate\ self-improvements, finalize poster, lend expertise to 1st year students.

TERM 5: Check deadlines for MUFSC Research Day and other poster presentations, print and present poster, attend and evaluate classmate poster presentations, review class/faculty evaluations, incorporate self-improvements, lend expertise to 1st year students.

When scheduling work and classes for the term, Friday should be left open for scheduling special guest seminars.

Seminar evaluation forms and information are available on our website http://muwww-new.marshall.edu/forensics/students

Poster Presentations

Poster Information: medix.marshall.edu/~levstein1/poster
https://musom.marshall.edu/ditmi/documents/PosterCreation_files/frame.htm

Poster Assistance: www.kumc.edu/SAH/OTEd/jradel/Poster_Presentations/PstrStart.html
www.ncsu.edu/project/posters

Ian Levstein and Tiffany Hussell are available to review and help with your poster design and presentation. All posters must be approved by the student's 3 research reviewers and by Ian Levstein prior to printing. The Program is not responsible for the cost to reprint posters if the proper procedures for poster review are not followed.

REQUIRED Poster Presentation: MU Forensic Science Research Day – April/Term 5
Research Poster Rubric is available via http://muwww-new.marshall.edu/forensics/students

Additional Poster Presentation Venues:

- Chesapeake Bay Division IAI Regional Meeting (www.cbdiai.org)
- IAI Annual International Educational Conference(www.theiai.org)
- MAAFS Regional Meeting (www.maafs.org)
- AAFS National Meeting - AAFS abstract deadline, August 1 (www.aafs.org)
- SOFT Meeting (www.soft-tox.org)

Poster Printing Instructions & Information

If you're converting your PPT poster to a PDF poster prior to submission for printing, you need to make sure that the PDF poster is, in fact, the right size. Very often, when you send a PPT file to the PDF printer, Acrobat will automatically resize the poster to its default of 8.5" x 11". You don't want that, so there are some steps you need to take to ensure that the results are what you actually want. Here's the step-by-step process to follow. This is a two-part process: 1) preparing the PPT file to print to PDF; and 2) checking the PDF poster.

In Powerpoint:

1) Click on the "view" tab, and select "Fit to Window"
2) Click on the "file" tab, and select "Print"
3) From the Printer pull down, select "Adobe PDF"
4) Click on "Printer Properties"
5) Click on the "Paper/Quality" tab
6) Click on the "Advanced" button
7) From the Paper Size pull down, select "PostScript Custom Page Size"
8) Change the width and height to match the size of your poster but invert the numbers

a. If your poster is 48" wide and 36" high, be sure to enter width as 36" and height as 48"

9) Click "OK", then click "OK" again
10) Click on the "Adobe PDF Settings" tab
11) Click on the "Add" button next to "Adobe PDF Page Size"
12) From the "Paper Names" pull down, select "Custom 1"
13) Change the width and height to match the size of your poster but invert the numbers

a. If your poster is 48" wide and 36" high, be sure to enter width as 36" and height as 48"

14) Click the "Add/Modify" button
15) Click "OK" ... this should bring you back to the print menu
16) From the Full Page Slides pull down, ensure that "Scale to Fit Paper" is checked
17) Click the "Print" button
18) Give your PDF file a name, and click "Save"

In Acrobat:

1) Your PDF file should look like your PPT poster

a. If it doesn't, skip to #5

2) Click "File" and select "Properties"
3) Under "Advanced" the page size should reflect the size of your poster
4) It should show the correct width and height in that order
5) If it shows something other than what you are expecting, retrace your steps and do it again
6) If you do it again and it still isn't right, do not give your PDF file to Nadine, bring your PPT file to me instead

The COSITC is located in the Science Building room 162. They are open from 8-4:30 and require 1 week lead time for a guaranteed poster to be printed. The maximum poster size is 52" x 52". They will also print on a first come first serve basis without the 1 week lead time but cannot guarantee that it will be ready by the date requested. THE COSITC staff are often out of the office on service calls so people not sending files electronically should call first to make sure someone is in the office if they are physically coming. Individuals can contact the COSITC front desk @ 696-3176, James Booth @ 696-2908, or Pete Glass @ 696-3595.

ALL POSTERS MUST BE REVIEWED & APPROVED BY THE STUDENT'S MU TOPIC ADVISOR WHO WILL SEND THE APPROVED POSTER TO DR. STATON. THE PROGRAM STAFF WILL SUBMIT THE POSTER VIA EMAIL TO cositc@marshall.edu.

POSTER PRESENTATION TIPS

- Practice presenting your poster.
- Letting people read the poster alone without attempting to engage them in your presentation is unacceptable.
- Your presentation should have a beginning (Why?), middle (How?), and ending (What's the big deal?).
- Assume that your listener knows very little about your topic.
- Think about how you would best digest the information in just a few minutes and present it using the tools that you believe to be most effective.
- Maintain good eye contact with your audience.
- Having a pen in hand is a good pointer but a finger does just as well.
- Nails should be clean and neat without crazy polish. Dress is "Professional". Because you're so close to your audience, they'll notice everything about you from your hair style to your shoes. Neat, clean, and conservative. A jacket is recommended for both sexes.
- Show your interest in your work by being enthusiastic in your presentation. If you act like it's no big deal, why should they care about it either? This is not the time to be cool and aloof. Use this opportunity to highlight yourself and your research.
- Point to your main sections and graphs/charts to focus your audience's attention. Physically move across your poster in a logical progression. At some point you may want to shift to the opposite side. Think of how the weather person does his/her report. They look good, show enthusiasm, and know their stuff.
- Interact with your poster. Talking without referring to the items on your poster is defeating the purpose.
- When someone walks up to your poster your objective is to draw them in. You want to "sell" yourself and your topic. You want to send them away saying "That was a really good presentation."

Suggested Presentation Format

"Hello. I'm _____. I am a graduate student in Marshall University Forensic Science Program. This past summer I conducted research at [LOCATION/LAB] under the direction of [SUPERVISOR] which focused on [PROJECT/TITLE]. Do you have a few minutes for me to explain my research project?"

Proceed with a 5-10 minute narrative that consists of your beginning, middle, and end. Let them know what future work should be done, if any.

"Do you have any questions?"

Resume and Curriculum Vitae Development & Mock Interviews

Fall Term/Seminar - 1st year students develop resumes. 2nd year students revise their resumes & develop CV's. 2nd year students prepare for mock interviews.

Spring Term/Seminar - 2nd-year students register and prepare for mock interviews. All students must register for at least 1 General Interview and at least 1 Specialty Area interview. Students have the option to register for multiple Specialty Area interviews.

For sample interview questions and evaluation, please visit the Student-Only section of the website at http://www.marshall.edu/forensics/students/student-only

Comprehensive Examination

Forensic Science students are required to pass a comprehensive written examination to be eligible for graduation. No more than two assessments are permitted. Failure to pass the comprehensive examination will result in the student being placed on probation during which time they must meet with their examining committee to discuss their deficiencies and identify strategies to correct them. Re-testing must be scheduled for a subsequent term. When students fail the second reassessment, the department will recommend their dismissal by the Graduate College.

The Comprehensive Examination is a day-long examination covering seven areas:

- Crime Scene and Death Investigation
- Forensic Analytical Chemistry
- Forensic Comparative Sciences

- Forensic Microscopy and Trace Analysis
- Foundations and Fundamentals of Digital Evidence
- Genetics and DNA Technologies
- Legal Issues in Forensic Science

Four weeks prior to the Examination, students are permitted to review their previous exams. These exams are on reserve in the Forensic Science Program Office. A designated area will be made available for exam review. Under no circumstances should these exams be copied nor should these exams be removed from the premises. Possession of current or past exams outside the Forensic Science Center is prohibited.

ACCESS AND USE OF PAST-EXAMS FOR COMPREHENSIVE EXAM STUDY

Past exams will be available for review Monday through Friday from 8 AM to 4 PM during the month of March. Exams are the property of the Forensic Science Program and cannot be copied. Notes may be taken during this time for study purposes only. Notes created from these exams must be returned to the Program on the day of the comprehensive examination and should not, under any circumstances, be viewed by anyone other than you. Exams cannot be taken off premises and must be checked-out and returned daily to a program official. We ask for your compliance in this matter so we can continue this activity in the future.

COMPREHENSIVE EXAM GRADING POLICY

The Instructor is responsible for exam content, submission of raw and scaled scores, pass/fail calls, and a statement of grading policy. The Instructor is also responsible for responding to any grievance filed regarding their section of the examination.

The Program Office assumes no responsibility for individual scores, calls, or grading policies but is available to administer and grade exam sections under the written guidance of the Instructor.

When all scores, interpretations, and standardized grading policies are received by the Program Office from the Instructor, the Comprehensive Examination Subcommittee made up of regular faculty will determine the Overall Pass/Fail designation for each student based on the following:

The student will fail the overall exam if:

- Any single section is below 70%
- Two or more sections are in the 70-79% range.

Students will be notified by the Program Office in writing based on the Comprehensive Exam Subcommittee's recommendations. The report will state Pass or Fail for each section and the class rank for each subject area. The retake policy will also be provided if the student fails the exam.

COMPREHENSIVE EXAM RE-TAKE POLICY

Students are permitted one opportunity to retake the exam consisting of all sections failed which will consist of one sitting. The retake exam cannot be scheduled during the term in which the initial exam was failed. The student may schedule this exam anytime within the subsequent term or thereafter but must be passed within the Graduate College 7 year restriction for completion of an MS degree. Should the student receive a failing grade on the second exam, the Forensic Science Program will recommend his/her dismissal from the Forensic Science Program.

The Comprehensive Examination Subcommittee is responsible for reviewing all individual calls, raw scores versus scaled scores, and approval of methods used for deriving the final scores and calls. The Comprehensive Examination Subcommittee will also make recommendations, if need be, for improving this policy, procedure, and exam content to improve consistency across all sections and item analysis for reliability.

The Graduate Catalog advises the following regarding reassessments: "Unless more restrictive guidelines are specified in the individual program description in this catalog, no more than two reassessments are permitted. In the event students fail to pass an assessment, they will be placed on probation and, prior to reassessment, must meet with their examining committee to discuss deficiencies and steps to correct them. Students may be assessed only one time a term or semester. When students fail the second reassessment, the department will recommend their dismissal by the Graduate College."

FORENSIC SCIENCE ASSESSMENT TEST
This examination is offered annually by the American Board of Criminalistics. See page 45 for more information.

ADDITIONAL CURRICULUM INFORMATION

Grade Point Average

To receive the Master of Science in Forensic Science degree, students must have a GPA of no less than 3.0 in all required course work. All grades of C or less are counted in computing averages, but no more than six (6) hours of C, and no grades below C, may be applied toward a master's degree in forensic science.

Receipt of a grade below C or more than 6 hours of C grades is grounds for program dismissal. In any term that the student's GPA drops below a 3.0, the student will receive notification from the Dean of the Graduate College that they have been placed on Academic Probation. As this occurs, the student and his/her academic advisor will develop a plan of action to assist the student in correcting this deficiency.

Incomplete Grade Policy

An *I* grade (Incomplete) is given to students who have completed at least three quarters of the work for the course, as determined by the instructor, but who do not complete course requirements for reasons deemed acceptable to the course instructor. The *I* grade is not considered in determining the Grade Point Average, except for graduation. Students must be in good standing in the class prior to requesting an incomplete. The course instructor decides whether or not an incomplete will be granted and specifies in writing what work the student must complete to fulfill the course requirements; this remaining-requirements description is to be submitted with the University's Incomplete Grade Form, with copies to the student and the instructor. To complete the course, the student has until the end of the next fall or spring semester, whichever comes earlier, after the semester in which the incomplete grade was assigned, or the instructor may establish an earlier deadline. If extenuating circumstances exist, which prevent the student from completing the course in the prescribed time, the incomplete grade may be extended with written approval of the instructor, the instructor's chair or division head, and the appropriate dean. If the student satisfactorily completes the course in the prescribed time he/she will receive either a letter grade, a CR grade, or an S grade, depending upon what type of grade is appropriate for the course. If the student fails to complete the course requirements during the stipulated time, the grade of *I* changes to a grade of *F, NC, or U, depending on the type of grade appropriate for the course.* All grades remain on the student's permanent record as originally submitted by the course instructor, except for *I* grades that have been completed and changed by the instructor. Any grade change is added to the permanent record.

Multiple Degrees

Forensic science students who wish to earn additional Master of Science degrees at Marshall University must list Forensic Science as the primary degree with the Bursar and Admissions Offices.

Thesis Option

Students may elect the thesis option which requires research and course work above and beyond the standard forensic science curriculum. The thesis option stresses a research component where students conduct original research and prepare, as well as defend, a written thesis based on their investigative findings. Each thesis-option student, along with their advisor, will select a graduate committee to oversee the thesis project and to assess its successful completion. The thesis option requires a minimum of FSC 685 (3 credit hours) and FSC 681 (3 credit hours) in addition to the general core curriculum and a minimum of one area of emphasis. The thesis option often requires additional semesters to complete. For more information on the Thesis submission process, visit www.marshall.edu/graduate/etd/default.asp.

FSC 660 Independent Study

Independent Study allows students to work on approved research projects for credit. A faculty sponsor is required along with completion of the Independent Study Form. Independent study must be approved by the student's Topic Advisor, Academic Advisor, and Dean prior to registration by filling out the form located in the Student-Only section of our website http://muwww-new.marshall.edu/forensics/students. The title of the Independent Study will appear on the student's transcript. Therefore, the student is cautioned to strategically create a title that is no more than **25 characters** (including spaces) that best represents the project. **Do not register online for Independent Study. Please see Dr. Staton for permission to register.** Permission to register for Independent Study requires completion of the appropriate form, course add form, and approval by the MU Topic Advisor and Academic Advisor prior to sending all required documents to the Dean for his/her approval. .

Forensic Science Program Office Independent Study Procedure:

1. Complete Independent Study form. Remember the title of your Independent Study will appear on your transcript. It can be no more than 25 characters including spaces. Form is available in the Student-Only section of our website http://muwww-new.marshall.edu/forensics/students
2. Get signature of sponsoring faculty member.
3. Complete Drop/Add form located at the Academic Program front desk. To do this you need the CRN# of the course, the section number, and the number of credit hours. Please see Academic Program Staff to get this information.
4. Obtain signature of your Academic Advisor.

Academic Advising

Each term, students are required to meet with his/her Academic Advisor, Dr. Staton, for academic advising. The student must complete a **Plan of Study** prior to their 12th hour in the program. The Plan of Study should be completed and emailed to the Academic Advisor and an appointment scheduled for approval. When making changes to the Plan of Study the student will follow the same procedure. Changes may be made in any term through March of the 5th semester in the program. Any academic or personal concerns or questions should be discussed with the student's Academic Advisor.Dr. Staton serves as the Academic Advisor to all Forensic Science students. Advising may occur with or without an appointment or via phone (see Faculty & Staff Directory) or e-mail staton1@marshall.edu. See http://www.marshall.edu/wpmu/forensics/students/student-only for more info.

A **Registration Worksheet** is provided for student advising and academic planning. This form may be found on our website in the Student-Only section at http://www.marshall.edu/forensics/students/student-only.

Professionalism and Ethics

The Program promotes sound work practices and professional/ethical behaviors through several means. Individuals are encouraged to become members of various professional organizations such as MUFIA, AAFS, IAI, and other forensic science-based, and related, organizations. While enrolled, the student will become familiar with various codes of ethical practice such as those published as The Code of Ethics and Conduct of the American Academy of Forensic Science, The American Society of Crime Laboratory Directors Code of Ethics, the American Board of Criminalistics Code of Ethics, and the Digital Forensic Certification Board (located later in this Handbook).

Attendance Policy

Attendance Requirements: Students enrolled in the Forensic Science Program are expected to attend all classes, laboratories, seminars, internship sessions, and presentations offered by guest speakers. Camtasia recordings may be available but only to those with excused absences. See Request for Excuse of Absence.

Course Attendance: It is the responsibility of each individual instructor to evaluate the importance of student class attendance. Each instructor prepares a written statement setting forth his or her policy for consideration of unexcused absences, make-up examinations, and related matters, which will be in force for the semester at the beginning of each semester. This statement is filed with the program and a statement of policy on attendance appropriate to each class is made available to students. There will be point reductions for unexcused absences. You must fill out an excused absence form and submit it to Dr. Staton for any class or seminar missed. Form is available at http://muwww-new.marshall.edu/forensics/students/student-only

Absences from Examinations: Students are required to take all regular examinations when they are scheduled. If a student attends a course throughout the semester and is absent from the final examination without permission the instructor counts the examination as zero and reports a final grade of F. If the absence is the result of legitimate illness or some other valid reason beyond the control of the student the grade of I is reported and the student may take the examination at a later date. Only legitimate reasons will be considered when students are absent from exams.

Medical Illness: Personal illness or illness of a close family member is a valid excuse for missing class. A written physician's note may be requested based on the requirements of the instructor(s) for a given course.

Death of Immediate Family Member: Absences such as those resulting from a death in the family are to be excused when a student reports and verifies them with the Program Director. There is no penalty for excused absences of this type.

Professional Travel: Often national, regional, and local forensic science meetings are scheduled during class time. It is not a policy of the Forensic Science Program to cancel classes for students to attend meetings. With the approval of all instructors class schedules may be changed to accommodate approved class travel. Marshall University Forensic Science Program, Marshall University, nor the West Virginia Policy Board for Higher Education is liable for accidents or injuries incurred during trips within or out of the state.

Formal Filing of Grievances

Prior to filing a formal complaint, the student is encouraged to discuss their concerns with an appropriate instructor, program official or academic advisor. The Forensic Science Program has a formal grievance procedure for handling formal complaints. A formal grievance should be filed when the institution, program, faculty, and/or staff is viewed as having violated certain student rights. To file a formal complaint, the student should provide their complaint in writing which is then sent to their academic advisor, Dr. Staton. All complaints will be maintained in a confidential file for a minimum of 5 years. Should the response or action taken be unacceptable to the student, then the student may request a hearing of their concerns through the Forensic Science Graduate Studies Committee. Students are referred to the Marshall University Graduate Catalog for more details on appeal procedures.

Special Activities Forms (SAF)

Complete, maintain, and submit a SAF each time you participate in a special activity. Examples of special activities are seminar slide presentations, poster presentations, conference or meeting presentations, internship interviews, job interviews, undergoing agency background checks, visiting various agencies, GA and work study positions, independent studies, external agency positions, etc. These activity records will be kept in your student file so that the Program can provide personalized letters of recommendation now and in the future as you request them. Maintaining this practice for your own personal records will assist you in creating a powerful resume now and throughout your professional career. This form is available online via http://muwww-new.marshall.edu/forensics/students/student-only (requires you to log in with your Marshall Login and password (ex. smith@som.marshall.edu and your MUNet password).

Creating a Portfolio

We recommend that you maintain a record of all educational activities while you are enrolled in the program and thereafter. Suggested materials are as follows:

- Resume
- Employment/internship contacts; GA or WS positions by date and descriptions of duties and supervisors with contact information
- Seminar slides and poster presentations by date and venue
- Meeting attendance by date and any educational sessions attended
- Workshops by content, presenter, and date
- Special award or honors
- Presentation evaluations
- Transcripts
- Independent Study reports
- Background check reports if available
- Information needed for completing background checks

- Internship information by date, agency, and supervisor
- Internship evaluations and research paper or hard-copy Internship Notebook itself
- Plan of Study
- Any other information needed for rapid response to job postings

Graduation

Marshall University observes two Commencement Exercises and four Graduation dates during an academic year. The official graduation dates are listed below. For the official Graduation and Commencement timetable, please visit http://muwww-new.marshall.edu/graduate/graduation-and-commencement-timetable/

- Last day of final examinations in July;
- Last day of final examinations in August;
- Last day of final examinations in December;
- Day of Commencement for the spring semester

Commencement exercises are held twice a year to honor candidates for associate, baccalaureate and advanced degrees (master's, specialist and doctoral). The spring ceremony honors students who complete their degree requirements between December and May and is held in May; the fall ceremony honors students who complete their degree requirements between May and December and is held in December. Check with the Graduate College for more information.

Application for Graduation

Applications for Graduation must be filed in the Office of the Graduate Dean no later than the date printed in the calendar of the final term or semester in which the degree requirements will be completed. Forms for applying for graduation may be found on the Graduate College web page. www.marshall.edu/graduate/
For Master of Science students, a diploma fee is assessed, payable at the Bursar's Office, and must be attached to the application before it will be accepted.

Graduation Reception and Hooding Ceremony

The Friday prior to Marshall University's Commencement Ceremony, the Forensic Science Program will host a Hooding Ceremony and Reception in honor of the graduating class. All students of the Program, as well as their family members and friends, are invited to attend.

Certification

Certification is a process whereby an individual receives public recognition by a professional certification agency for having met established qualifications and educational standards. Generally, individuals become certified by passing a certification examination such as given by the *American Board of Criminalistics (ABC)*. Graduates are encouraged to seek certification by the ABC, or other certifying body recognized by the forensic science community.

Students are encouraged to become nationally recognized by the American Board of Criminalistics (ABC) by taking the Forensic Science Assessment Test (FSAT) prior to graduation.

In general, national certification is an excellent means of enhancing an individual's resume and/or credentials. Certification is available from a variety of certification agencies depending on the specialty area of certification desired. Some of these require several years of experience before obtaining. See the Professional Organizations section for websites and more information.

- American Board of Criminalistics http://www.criminalistics.com/
- Forensic Document Examiner www.abfde.org
- Forensic Toxicology Specialist www.abft.org
- Basic Student Knowledge CSI & Other Certifications www.theiai.org/certifications/
- Forensic Science (Student) Assessment Test www.criminalistics.com
- Various Certifications through the American Board of Criminalistics www.criminalistics.com

CRIME SCENE INVESTIGATION EMPHASIS BY SEMESTER

1st Year, Fall Semester

Course No.	Course	Credit Hours
FSC 606	Crime Scene and Death Investigation	2
FSC 622	Forensic Analytical Chemistry	3
FSC 624	Biochemistry	4
FSC 632	Foundations and Fundamentals of Digital Evidence	3
FSC 680	Seminar 1	1
Total		**13**

1st Year, Spring Semester

Course No.	Course	Credit Hours
FSC 604	Genetics and DNA Technology	3
FSC 617	Advanced Photography and Documentation	3
FSC 618	Forensic Comparative Science	2
FSC 623	Forensic Analytical Chemistry Lab	1
FSC 680	Seminar 2	1
Total		**10**

1st Year, Summer Semester

Course No.	Course	Credit Hours
FSC 630	Internship	5
Total		**5**

2nd Year, Fall Semester

Course No.	Course	Credit Hours
FSC 615	Advanced Crime Scene Investigation	3
FSC 612	Forensics Microscopy and Trace Analysis	2
FSC 680	Seminar 3	1
N/A	Elective*	3
Total		**9**

2nd Year, Spring Semester

Course No.	Course	Credit Hours
FSC 665	Legal Issues in Forensic Science	3
FSC 607	Blood Pattern Analysis	3
FSC 680	Seminar 4	1
FSC 619	Forensic Science Statistics	3
Total		**10**

9 hrs. are required to be full-time

*The 3hr elective is waived for those completing multiple areas of emphasis

TOTAL HOURS:	**47***

**for one area of emphasis (44 for more than one area of emphasis)*

DIGITAL FORENSICS EMPHASIS BY SEMESTER

1st Year, Fall Semester

Course No.	Course	Credit Hours
FSC 606	Crime Scene and Death Investigation	2
FSC 622	Forensic Analytical Chemistry	3
FSC 624	Biochemistry	4
FSC 632	Foundations and Fundamentals of Digital Evidence	3
FSC 680	Seminar 1	1
Total		**13**

1st Year, Spring Semester

Course No.	Course	Credit Hours
FSC 604	Genetics and DNA Technology	3
FSC 618	Forensic Comparative Science	2
FSC 623	Forensic Analytical Chemistry Lab	1
FSC 634	Digital Evidence Search and Seizure	3
FSC 680	Seminar 2	1
Total		**12**

2nd Year, Spring Semester

Course No.	Course	Credit Hours
FSC 665	Legal Issues in Forensic Science	3
FSC 676	Advanced Digital Evidence Detection and Recovery (if not taken in term 2)	2
FSC 605	Digital Imaging	3
FSC 680	Seminar 4	1
FSC 619	Forensic Science Statistics	3
Total		**7**

9 hrs. are required to be full-time

*The 3 hr. elective is waived for those completing multiple areas of emphasis

1st Year, Summer Semester

Course No.	Course	Credit Hours
FSC 630	Internship	5
Total		**5**

2nd Year, Fall Semester

Course No.	Course	Credit Hours
FSC 609	Network Forensics	3
FSC 612	Forensics Microscopy and Trace Analysis	2
FSC 680	Seminar 3	1
N/A	Elective*	3
Total		**10**

TOTAL HOURS:	**49***

**for one area of emphasis (46 for more than one area of emphasis)*

DNA ANALYSIS EMPHASIS BY SEMESTER

1st Year, Fall Semester

Course No.	Course	Credit Hours
FSC 606	Crime Scene and Death Investigation	2
FSC 622	Forensic Analytical Chemistry	3
FSC 624	Biochemistry	4
FSC 632	Foundations and Fundamentals of Digital Evidence	3
FSC 680	Seminar 1	1
FSC 650	DNA Technical Assistance I (Optional)**	2
Total		**13-15**

1st Year, Spring Semester

Course No.	Course	Credit Hours
FSC 603	Genetics and DNA Laboratory	1
FSC 604	Genetics and DNA Technology Lecture	3
FSC 614	Human Genetics	2
FSC 618	Forensic Comparative Science	2
FSC 623	Forensic Analytical Chemistry Lab	1
FSC 680	Seminar 2	1
FSC 650	DNA Technical Assistance II (Optional)**	2
Total		**10-12**

1st Year, Summer Semester

Course No.	Course	Credit Hours
FSC 630	Internship	5
Total		**5**

2nd Year, Fall Semester

Course No.	Course	Credit Hours
FSC 612	Forensics Microscopy and Trace Analysis	2
FSC 680	Seminar 3	1
BSC 550	Molecular Biology	3
FSC 629	Advanced DNA Technologies	2
Total		**8**

2nd Year, Spring Semester

Course No.	Course	Credit Hours
FSC 665	Legal Issues in Forensic Science	3
FSC 680	Seminar 4	1
FSC 619	Forensic Science Statistics	3
Total		**7**

9 hrs. are required to be full-time

*The 3 hr. elective is waived for those completing multiple areas of emphasis

** If completing 1 area of emphasis (DNA), DNA Technical Assistance (4 credits) can count as the elective.

TOTAL HOURS (ONE AREA OF EMPHASIS)	**42-46***

**for one area of emphasis 42, with TAP 46*

FORENSIC CHEMISTRY EMPHASIS BY SEMESTER

1st Year, Fall Semester

Course No.	Course	Credit Hours
FSC 606	Crime Scene and Death Investigation	2
FSC 622	Forensic Analytical Chemistry	3
FSC 624	Biochemistry	4
FSC 632	Foundations and Fundamentals of Digital Evidence	3
FSC 680	Seminar 1	1
Total		**13**

1st Year, Spring Semester

Course No.	Course	Credit Hours
FSC 604	Genetics and DNA Technology Lecture	3
FSC 618	Forensic Comparative Science	2
FSC 623	Forensic Analytical Chemistry Lab	1
FSC 626	Forensic Drug Analysis	2
FSC 680	Seminar 2	1
N/A	Elective*	3
Total		**12**

1st Year, Summer Semester

Course No.	Course	Credit Hours
FSC 630	Internship	5
Total		**5**

2nd Year, Fall Semester

Course No.	Course	Credit Hours
FSC 608	Forensic Toxicology	3
FSC 612	Forensics Microscopy and Trace Analysis	2
FSC 680	Seminar 3	1
FSC 628	Chemical Analysis of Trace Evidence	3
Total		**9**

2nd Year, Spring Semester

Course No.	Course	Credit Hours
FSC 665	Legal Issues in Forensic Science	3
FSC 680	Seminar 4	1
FSC 619	Forensic Science Statistics	3
Total		**7**

9 hrs. are required to be full-time

*The 3 hr. elective is waived for those completing multiple areas of emphasis

TOTAL HOURS:	**47***

**for one area of emphasis (44 for more than one area of emphasis)*

COURSE DESCRIPTIONS

In Alphabetical Order

BSC 550 Molecular Biology

3 Credits, Lecture, Required for DNA Emphasis, 4th Term

Advanced principles in molecular function emphasizing current research using recombinant DNA methodology.

FSC 603 Genetics and DNA Laboratory

3 Credits, Lab, Required for DNA Emphasis, 2nd Term

Laboratory to be offered in conjunction with FSC 604 Genetics and DNA Technology stressing techniques and methods required for DNA analysis used in forensic case investigations, in CODIS laboratories and in paternity testing.

FSC 604 Genetics and DNA Technology

3 Credits, Lecture, Core Requirement, 2nd Term

A comprehensive lecture series that covers the genetics and biochemistry of DNA to include the analysis, ethical considerations and quality assurance techniques used to analyze DNA for identification purposes. This course serves as a core course in the forensic science curriculum.

FSC 605 Digital Imaging

3 Credits, Lecture, Required for Digital Forensics Emphasis, 2nd or 5th Term

Introductory course in digital image processing. Covers techniques used in forensic laboratory to enhance, analyze, and catalog digital images. Instruction in a laboratory setting.

FSC 606 Crime Scene and Death Investigation

2 Credits; Lecture, Mock Crime Scene, Core Requirement; 1st Term

Establishes foundations and techniques for proper crime scene investigation with or without a victim's body. Logical approach for collecting evidence and documenting scene and collection process.

FSC 607 Bloodstain Pattern Analysis

3 Credits, Lecture and Lab, Required for CSI Emphasis, 5th Term

This course is designed to take the basic knowledge and ability learned in FSC 606 with application to more technical and advanced aspects of crime scene investigation.

FSC 608 Forensic Toxicology

3 Credits, Lecture, Required for Chemistry Emphasis, 4th Term

An in-depth analysis of both clinical and forensic aspects of toxicology from the viewpoint of the forensic and medical examiner's toxicology laboratories.

FSC 609 Network Forensics

3 Credits, Lecture and lab, Required for Digital Forensics Emphasis, 4th Term

Teaches the basics of how computers and networks function, how they can be involved in crimes as well as a source of evidence.

FSC 610 Bioterrorism

3 Credits, Lecture, Elective

Course traces the historical development, current status, and future threats of bioterrorism in the U.S. and on a global scale. Issues addressed include microbiology, surveillance, detection and post-event investigation.

FSC 612 Forensics Microscopy and Trace Analysis

2 Credits, Lecture and lab, Core Requirement, 4th Term

Introduction to various types of microscopy used in forensics, including scanning electron, light, fluorescence and polarizing microscopy.

FSC 615 Advanced Crime Scene Investigation

3 Credits, Lecture and lab, Required CSI Emphasis, 4th Term

This course addresses various areas of crime scene investigation not, or minimally, addressed in the FSC 606 introductory course. Topics include arson/explosives, body excavation, forensic entomology, advanced impression evidence, wound analysis.

FSC 617 Advanced Photography and Documentation

3 Credits, Lecture and lab, Required CSI Emphasis, 2nd Term

This series of lectures and practical exercises introduces the student to sophisticated crime scene documentation techniques including sketching, surveying, photography, and crime scene management techniques.

FSC 618 Forensic Comparative Science

2 Credits, Lecture and lab, Core Requirements, 2nd Term

Introduction to comparative methods used by forensic scientists for analysis of fingerprints, questioned documents, and firearms.

FSC 619 Forensic Science Statistics

3 Credits, Lecture, Core Requirement, 5th Term

Course covers basic theory of probability and statistics, Bayesian Analysis, likelihood ratios, population and statistical aspects of genetics, statistical issues in paternity testing and mixtures, and presenting evidence. (PR: Admission to M.S. program in Forensic Science, or permission)

FSC 622 Forensic Analytical Chemistry

3 Credits, Lecture, Core Requirement, 1st Term

Analytical chemistry instrumentation and methods used by forensic scientists for analysis of drugs, toxicology, arson, explosives, trace evidence and sample collection and processing.

FSC 623 Forensic Analytical Chemistry Lab

1 Credit, Lab, Core Requirement, 2nd Term

Laboratory practicum will develop skill set needed in the forensic analysis of physical evidence using standard methods and modern analytical instrumentation.

FSC 624 Biochemistry

4 Credits, Lecture and lab, Core Requirement, 1st Term

This comprehensive course in biochemistry focuses on concepts appropriate to forensic science and designed to meet forensic science educational standards at a national level.

FSC 626 Forensic Drug Analysis

2 Credits, Lecture, Required for Chemistry Emphasis, 2nd Term (or 5th Term as approved)

Concentration on modern analytical methods used in isolation and identification of illicit drugs and their metabolites in biological samples and other forensic evidence.

FSC 627 Human Genetics

2 Credits, Lecture, Required for DNA Emphasis, 2nd Term (or 5th Term as approved)

The course focuses on heritable human diseases. Major topics include the metabolic/molecular basis and detection of inherited disease, gene mapping, and genetic risk assessment. Topics in population genetics and statistical approaches are included. This course is designed to satisfy the requirements set-forth by the DNA Advisory Board (DAB).

FSC 628 Chemical Analysis of Trace Evidence

2 Credits, Lecture, Required for Chemistry Emphasis, 4th Term

This course emphasizes the use of various sensitive analytical techniques including pyrolysis-GCMS, micro-FTIR, GPC, capillary electrophoresis and chemical microscopy in the analysis of trace evidence including paint, inks, fibers, explosives and plastics.

FSC 629 Advanced DNA Technologies

2 Credits, Lecture, Required for DNA Emphasis, 4th Term
This course will provide advanced instruction in DNA technologies to assist in the preparation for a career in a forensic DNA laboratory.

FSC 630 Forensic Science Internship
5 Credits, Internship or assistantship, Core Requirement, 3rd Term
A 10 week internship in a crime lab or other forensic science related research laboratory. Application of principles and techniques learned during the first year of program. (PR: Completion of two semesters in Forensic Science Program).

FSC 632 Foundations and Fundamentals in Digital Evidence
3 Credits, Lecture, Core Requirement, 1st Term
This course will provide an overview of the foundations of Digital Forensics and its component sub-disciplines: computer, cell phones, audio and video forensics.

FSC 634 Digital Evidence Search and Seizure
3 Credits, Lecture and Lab, Computer Emphasis Requirement, 2nd Term
Introduces students to the information required by investigators in the proper procedures for seizing computer systems and related storage devices used in the commission of a crime. Includes special needs of the field examiner and legal issues such as probable cause and evidence preservation secular to seizing computer systems.

FSC 650 DNA Technical Assistance
Technical Assistance Term 1, Technical Assistance Term 2. Recommended for students aspiring to be DNA Analysts or Technical Leaders in a DNA Lab.

FSC 650 Firearms and Toolmarks Technical Assistance
Technical Assistance Term 1, Technical Assistance Term 2. Recommended for students aspiring to become Firearms and Toolmark Examiners or wishing to enhance their knowledge in this area.

FSC 650 Laboratory Management
Term 5
Recommended for students aspiring to be technical leaders, supervisors, or lab managers

FSC 660 Independent Studies
1-3 Credits
Reserved for directed and independent research, problems reports, etc. **A specific form is required prior to registration.** No online registration is permitted.

FSC 665 Legal Issues in Forensic Science
3 Credits, Lecture, Core Requirement, 5th Term
Covers the American legal system with specific emphasis on expert witnessing by forensic scientists. Mock trials provide experience in the courtroom.

FSC 676 Advanced Digital Evidence Detection and Recovery
2 Credits, Lecture, Computer Emphasis Requirement, 5th Term
This course will provide an overview of the advanced procedures and techniques used by investigators working with digital evidence. The course will be taught as a combination of lectures, laboratory and practical exercises.

FSC 680 Seminar
1 Credit, Core Requirement, Terms 1, 2, 4, 5
Faculty, student and guest speaker presentations on topics pertinent to forensic science.

FSC 681 Thesis

1-6 Credits, Thesis-only, 7th Term

Research conducted in the laboratories at Marshall University focused on a problem of forensic importance. The original research problem will be written up as a formal document and submitted as part of the requirements to fulfill a Master of Science degree in the research track.

FSC 685 Introduction to Research

3 Credits, Thesis Only, 6th Term

Directed research which can be used to satisfy requirements for a Master of Science Degree in Forensic Science. Required for thesis students. Includes literature search and formal proposal development and approval.

Other Elective Course Descriptions can be found on www.marshall.edu.

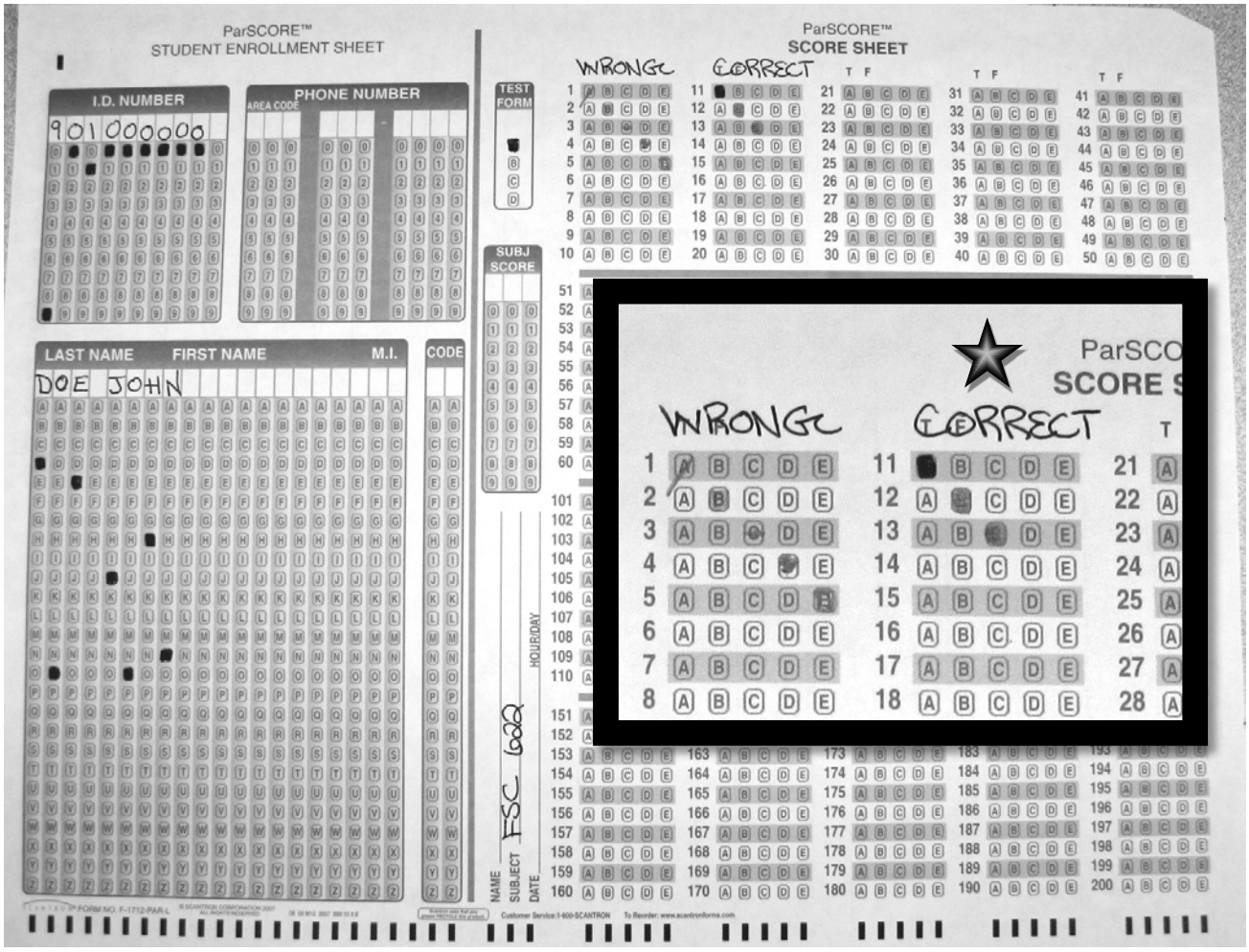
ParSCORE TEST FORM INSTRUCTIONS

For the best possible results on grading your exams, please follow these directions:

1. **Filling in bubbles**
    a. Use a #2 pencil or black pen for best results
    b. The entire rectangle must be filled in. A single thin line through the answer not read by the scanner, resulting in a wrong answer.
    c. Incomplete erasing will result in multiple marks for an answer and be graded incorrectly.

2. **I.D. number** is required. Write out your 901#, as well as bubble in each number.
3. **Last Name, First name** is required. Write out your name, and make sure to bubble each letter in fully.
4. **Test Form** is required. The default is "A", unless otherwise specified by professor or test proctor.
5. **Subj Score.** Leave blank. This will be used by professors who have subjective scores.
6. **Name/Subject** - Print the Course on the Subject Line.

On the sample form below, please note that answers 11, 12, and 13 are correctly filled in. Answers 1-5 are examples of INCORRECT marking of the test form and can result in an incorrectly graded exam.



STUDENT TRAVEL FOR ACADEMIC PURPOSE

Marshall University Forensic Science Academic Program Travel Award

Marshall University Forensic Science Academic Program Travel Award

Students enrolled full-time with a GPA of 3.0 or greater are eligible for a one-time $100 travel award to **attend** a national or regional meeting and a one-time $200 travel award to **present** at a national or regional meeting.

To apply, complete the MUFS Academic Program Travel Award form, available at the Academic Program Office or http://muwww-new.marshall.edu/forensics/students/student-only The application for travel funds must be completed at least 3 weeks prior to travel so all approvals and paperwork can be completed.

Marshall University Graduate College Travel Award

Students who are enrolled full-time with a GPA of 3.0 or greater and are **presenting** at a national or regional meetings are encouraged to apply for a travel award through the Dean of the Graduate College, Dean Donna Spindel. This should be done PRIOR TO requesting funds from the Forensic Science Program. When Graduate College funds have been depleted provide documentation that the request was denied by the Graduate College and follow the procedure above.

To apply: Use the sample template to request funds from the Dean. When completed, send the documents to Dr. Staton who will forward the request to Dean Spindel with a recommendation. Example:

September 15, 2012

Benjamin Linus
Marshall University Forensic Science
benjamin.linus@marshall.edu
(555) 555-5555

Attention: Office of the Dean of the Graduate College
Dr. Donna Spindel
Re: Travel Funds

To Whom It May Concern:

My name is Benjamin Linus, and I am a graduate student at the MUFSC. I will be attending a conference in October where I will be presenting research conducted this summer at the Office of the Chief Medical Examiner in Charleston, WV. I would like to apply for any travel funds that may be available. Included below is all requested information by Dean Deutsch per Dr. Staton, our Internship Coordinator. If you have any questions, please feel free to contact me.

Thank you for your time and assistance,

Benjamin Linus

CONFERENCE INFORMATION
Conference: Society of Forensic Toxicologists (SOFT) 2011
Location: Raleigh-Durham, NC
Dates of Conference: October 15-19, 2011
Student Presenter: Benjamin Linus
Title: Detection of Cocaine in Postmortem Oral Swab Samples

Estimated Travel Budget:

- Lodging: $115 + 12% lodging tax per night for 5 nights
  - $128.80 per night * 5 nights = $644
- Registration: $95
- Mileage: 360 miles one way, average of $2.90 per gallon, with 25 mpg

- 720miles/25mpg = 29 gallons * 2.90 $/gal. = $84
- Food (unknown costs at this time)

ABSTRACT:

Detection of Cocaine in Postmortem Oral Swab Sample

Benjamin Linus*[1], David J. Clay[2], Valerie M. Hummert[1], Kristen M. Bailey[2], and James C. Kraner[2]

[1]Forensic Science Graduate Program, Marshall University, Huntington, WV, U.S.A.;

[2]Office of the Chief Medical Examiner, Charleston, WV, U.S.A.

One of the most active areas of forensic toxicology research is the investigation of alternative matrices such as hair, sweat and oral fluid. Previous studies have examined the use of oral fluid as an alternative matrix for drug screening. However, the use of oral swab samples obtained postmortem has not been as thoroughly addressed. Forensic laboratories commonly use enzyme immunoassay of blood, serum or urine to screen for evidence of drug use, but these samples are not always readily available at autopsy. Therefore, the goal of this study was to evaluate oral swabs collected prior to autopsy as an alternative sample for detection of cocaine.

Validation studies were performed on standard laboratory cotton tipped swabs spiked with known concentration of cocaine dissolved in 100 uL of blank saliva. A simple method was used in which swabs were eluted into 1 mL of methanol, centrifuged, decanted, dried under nitrogen, reconstituted in methanol and injected onto GC-MS and analyzed in full scan mode. A deuterated internal standard (Cocaine-D3) was added before centrifugation for quantitation purposes. Calibrators of 25, 50, 200, 500 and 1000 ng/mL were prepared to develop a calibration curve. Controls of 65, 100 and 400 ng/mL were analyzed to demonstrate accuracy and precision. This method was evaluated over the range of 7.5 - 1000 ng/mL, with a limit of detection of 10 ng/mL and limit of quantitation of 25 ng/mL Interday samples run in triplicate resulted in recovery of 99.3 ± 5.4%. The intraday samples, also in triplicate, resulted in an average recovery of 105.9 ± 6.61%.

Oral swabs were collected from fifteen postmortem cases in which drug overdose was the suspected cause of death and the presence of cocaine and/or benzoylecgonine was confirmed by GC-MS analysis of the blood. The average amount of material collected on the swabs was 85 mg ± 48 mg. Cocaine was detected in twelve oral swabs from death investigation cases which were also positive for cocaine in the blood. Amount of cocaine on the swab ranged from < 10 ng/swab to > 1000 ng/swab. Two case swabs screened positive for cocaine in which only the metabolite, benzoylecgonine was found in the blood. In conclusion, oral swab samples obtained prior to autopsy may serve as a useful specimen for identifying drug use.

Keywords: Oral Swabs, Cocaine, Postmortem

Dr. Leonard J. Deutsch Graduate College Professional Development Fund

Provides travel funding for students to attend conferences and to present their work at conferences. Please note that travel support awards are typically in the form of reimbursement for travel.

Applications are considered as submitted. Applications are available via www.marshall.edu/graduate.

Graduate Summer Thesis Award

The Graduate College awards several Summer Thesis Research Grants for the period covering the end of the spring semester to June 30 of each year. Graduate students who have approved thesis projects may apply for a $500 grant to support their thesis research. In most cases, grant recipients may not hold a graduate assistantship simultaneously. Applications are available via www.marshall.edu/graduate

Student Travel Receipts and Records

Lodging - Receipt must be an original or certified as an original. If you share a room with another guest, this needs to be documented and you must provide proof of payment in YOUR name.

Transportation - In cases where a business traveler chooses to drive rather than fly, reimbursement will be based on actual in-transit expenses (mileage, hotel, meals, etc.), not to exceed the lowest available commercial airfare plus local transportation to and from the airport. An airfare comparison from one of the university's sources must be submitted if you choose to drive.

Meals - Itemized receipts are required for student travel or in lieu of receipts for students, a student signature form may be provided in accordance with the institution's administrative procedures. The form is located at the front desk.

PROFESSIONAL AND STUDENT ORGANIZATIONS

Masters United Forensic Identification Association (MUFIA)

The Masters United Forensic Identification Association, MUFIA, is the student organization of the Forensic Science Program. It is a student run organization with the purpose of promoting interest in forensic science and the academic and professional advancement of its members at Marshall University. Members are usually made up of the graduate students in the program, but membership is also extended to select undergraduates. We meet to discuss program issues, fundraising, outside interests, and planning our annual trip to the American Academy of Forensic Sciences Meeting.

AAFS is a great opportunity to gain further training and education, learn about advances in the forensic community, and meet professionals who are in the field. You also have the opportunity to enjoy the host city and its associated fun. MUFIA also encourages our members to explore other professional organizations such as the International Association of Identification (IAI).

Future AAFS Meetings:
February 16-21, 2015 in Orlando, Florida – The Peabody Orlando
Feb. 22-27, 2016 – Las Vegas, NV – Rio Las Vegas Hotel
Feb. 13-18, 2017 – New Orleans, LA – Hyatt Regency New Orleans
Feb. 19-24, 2018 – Seattle, WA – Washington State Convention Center
Feb. 18-23, 2019 - Baltimore, MD - The Baltimore Convention Center

Future IAI Meetings:
August 2-8, 2015 in Sacramento, California
August 7-13, 2016 in Cincinnati, Ohio
August 6-12, 2017 in Atlanta, Georgia
July 29-August 4, 2018 in San Antonio, Texas

Future Chesapeake Bay IAI Meetings: www.cbdiai.org
October 10-11, 2014 – Fall Educational Conference – Williamsburg, Virginia

Future Mid-Atlantic Association of Forensic Science Meetings
May 18-22, 2015: Hyatt Regency, Chesapeake Bay, MD

As well as introducing the members to different professional organizations, MUFIA maintains an updated version of the Forensic Science Program's alumni directory. This directory includes current addresses and job titles of each alumnus to help current forensic science graduate students with contacts for possible summer internships and future employment opportunities.

MUFIA maintains three major fundraisers, which are used to help offset the cost of attendance to the AAFS conference. MUFIA offers an online store that sells MUFIA and forensic science related items. The site can be visited at **www.cafepress.com/MUFIA**. T-shirts, hats and infant clothing are a few of the many items that may be purchased with one of over a dozen designs. Members of the organization design ideas for t-shirts and other items sold at Café Press. MUFIA also maintains the **Honors Fridge.** It simply is a snack center with chips, candy and soda for sale. Anyone who purchases anything is trusted to pay his or her debt in the designated collection jar.

CSI Huntington – MUFIA sponsored community event to educate the public about forensic science.

This year we also plan to hold car washes, among other events to assist further in lowering the cost of attendance for the AAFS meeting.

Membership dues are generally between $25-30. We do fundraisers every year in order to attend the national AAFS meeting. Dues-paying members are eligible to partake in the profit from fundraising. If members participate in the fundraisers, they can decrease their cost of attending the meeting.

2013-2014 MUFIA OFFICERS & CONTACT INFO:

•Betsy Maldonado
President
Phone: 970-324-7840
E-mail: maldonado5@live.marshall.edu

•Harrison Redd
Vice-President
Phone: 520-250-6930
E-mail: redd17@marshall.edu

•Corinne Byrdsong
Secretary
Phone: 505-353-1940
E-mail: byrdsong@live.marshall.edu

•Hannah Kennedy
Treasurer
Phone: 740-357-8253
E-mail: kennedy110@live.marshall.edu

•Mack Kilkeary
Fundraising
Phone: 518-578-7233
E-mail: kilkeary@live.marshall.edu

•Dr. Pamela Staton
Faculty Advisor

MASTERS UNITED FORENSIC IDENTIFICATION ASSOCIATION (MUFIA) CONSTITUTION

ARTICLE I

Section 1. Purpose

The purpose of this organization is to promote interest and advancement of Forensic Science at Marshall University.

Section 2. Parliamentary Procedure

All questions of parliamentary procedure at any meeting of the membership, or at any committee meeting shall be settled according to the last edition of "Robert's Rules of Order" except where otherwise ordered by the two-thirds majority of those members at any such meeting.

ARTICLE II MEMBERSHIP

Section 1. Qualification

All graduate students of the Marshall University Forensic Science Graduate Program are eligible to become a member of the Marshall University Forensic Identification Association. Alumni of the program that are currently attending Marshall University are also eligible for membership. Alumni of the program not currently enrolled in courses and undergraduate students are allowed to attend all open meetings and functions and to receive organization publications. Membership is open to all without regards to race, sex, color, ethnic origin, religious affiliation, age, physical or psychological handicap, or sexual orientation.

Section 2. Rights and Obligations

All members shall:

- Be entitled to attend all functions
- Be entitled to vote at all general and special meetings, and;
- Be required to adhere to the constitution of the organization.

Section 3. Resignation
A member may resign from office or from the organization at any regular or special meeting verbally or at any time in writing.

Section 4. Suspension
Any member, who for any act or conduct which by the decision of the club officers is injurious to the best interest of this organization, may be suspended from the club upon two-thirds affirmative vote of the club attending members.

Section 5. Meetings
Regular Membership Meetings - Regular membership meetings will be held once a month. The actual day may vary due to room availability and trip schedules.
Special Meetings - Special meetings may be called by the President.
Committee Meetings - Committee meetings will be held as deemed necessary by their directors.
Conduct - Persons disturbing the peace during any meeting in any manner may be fined or suspended.
Quorum - All active members in attendance at any regular meeting or special meeting shall constitute a quorum.

ARTICLE III DUES

Section 1. Dues
The club officers shall establish membership dues and payment schedule. The membership fee shall be charged to all members per semester or per year to be used towards the development of the organization.

ARTICLE IV

Section 1. Officers
The officers of this organization shall be President, Vice-President/Secretary, Treasurer, and the Fundraising Coordinator.

Section 2. Qualifications
A candidate for an elected office must be a student of Marshall University with a minimum GPA of 3.0. Although not a requirement it is hoped that the candidate will have at least one semester of club experience and knowledge of the club's activities.

Section 3. Term of Office and Vacancy
All officers shall be elected to serve for the term of one (1) year from May 1 to April 30. Upon the occurrence of any vacancy, the organization will elect a successor to serve for the remainder of the unexpired term.

Section 4. Elections
Elections will be held once a year at the discretion of the members and club officers. Candidates for office must be present at the meeting to be elected. A simple majority vote from the attending members will decide those who are elected. The officers-elect will then shadow the current officers until their term expires.

Section 5. Duties

ARTICLE V

Section 1. Committees and Non-elected positions
The committees of this organization shall be determined by the President and the officers of the organization when deemed necessary.
President - The president shall be the chief executive officer of this organization. He or she shall preside over all of its meetings and shall assign duties to the officers/members as required.

Vice-President/ Secretary - The Vice-President/ Secretary shall be responsible for expediting and coordinating committee assignments and activities. He or she will take minutes at all regular or special meetings and have custody of records vital to the organization. He or she will also assume the responsibilities of the President when he or she is unable to perform their duties.

Treasurer - The Treasurer will have custody of all funds that may come into the club's possession, keep complete records of funds, report status of same at all regular membership meetings, and provide basic budget information for functions.

Fundraising Coordinator - The fundraising coordinator shall be responsible for planning and execution of all fundraising activities, including, but not limited to T-shirt sales and the Honors Fridge. He or she will communicate all plans to the officers and members as necessary.

ARTICLE VI

Section 1. Amendments to Bylaws

These bylaws may only be amended by a majority of the voting membership. The club's officers shall determine the time and method of voting.

ARTICLE VII

Section 1. Hazing Policy

In accordance with the policies of Marshall University and all national organizations represented on our campus, hazing will not be permitted. All acts of hazing by any organization member are forbidden, they are… "Any action taken or situation created intentionally whether on or off campus, to produce mental, emotional, or physical discomfort, embarrassment, harassment, or ridicule. Such activities and situations may include paddling, creation of excessive fatigue, sleep deprivation, shocks, inappropriate quests, engaging in public stunts, morally degrading or humiliating games or activities, or any activity that compromises the dignity of the individual including forced use and abuse of alcohol and drugs."

AMENDMENT I

Full membership shall be extended to selected undergraduate students at Marshall University by invitation and majority vote by the current membership. Any current member of the organization may introduce a Marshall student to the membership. Under the Constitution of the organization, non-member undergraduate students are permitted to attend all open meetings and events; the President of the organization may require that a student under consideration for membership attend a number of meetings and/or events to allow current members the opportunity to make an informed vote regarding his/her membership. Once approved for membership, such members will be entitled to all rights and obligations under the constitution.

DELTA DELTA EPSILON ZETA CHAPTER

Delta Delta Epsilon is a national honor society dedicated to recognizing and encouraging excellence in scholarship in the Forensic Sciences. The mission is to function as an honor and professional society for students of the forensic sciences. To accomplish this mission, Zeta Chapter shall

- Promote scholarship and encourage intellectual development,
- Confer distinction for high achievement,
- Promote leadership development,
- Stimulate student and faculty dialogue,
- Enrich the intellectual environment of higher education institutions,
- Encourage high standards of practice and ethical behavior, and promote attitudes of professional responsibility for the public good.

President: **Alyssa Tinnin**
Vice President: **Preston Miller**
Secretary: **AJ Montanez**
Treasurer: **Kel Daniel**
Editor: **Hannah Kennedy/Darcie Winkler**
Advisor: **Dr. Lauren Waugh**

YOUNG FORENSIC SCIENTISTS FORUM (YFSF) http://yfsf.aafs.org/

The YFSF (Young Forensic Scientists Forum) is a group within the American Academy of Forensic Sciences (AAFS) that is dedicated to the education, enrichment, and development of emerging forensic scientists and future leaders of the

field. The participants of the YFSF are drawn from all sections and membership levels of AAFS. The YFSF provides an avenue for new forensic scientists to interact with and become part of the established forensic science community. This is accomplished through meetings and educational sessions at the annual AAFS conference, a semi-annual newsletter, a mentorship program, informational databases, and the website.

AMERICAN ASSOCIATION OF FORENSIC SCIENCES (AAFS) www.aafs.org

AAFS, a nonprofit professional society organized in 1948, is devoted to the improvement, the administration, and the achievement of justice through the application of science to the processes of law.

For nearly sixty years AAFS has served a distinguished and diverse membership. Its nearly 6,000 members are divided into ten sections spanning the forensic enterprise. Included among the Academy's members are physicians, attorneys, dentists, toxicologists, physical anthropologists, document examiners, psychiatrists, engineers, physicists, chemists, criminalists, educators, and others. Representing all 50 United States, Canada, and 56 other countries worldwide, they actively practice forensic science and, in many cases, teach and conduct research in the field as well. Each section provides opportunities for professional development, personal contacts, awards, and recognition. Many sections publish periodic newsletters and mailings which keep their members abreast of activities and developments in their fields.

As a professional society dedicated to the application of science to the law AAFS is committed to the promotion of education and the elevation of accuracy, precision, and specificity in the forensic sciences. It does so via the Journal of Forensic Sciences (JFS), its internationally recognized scientific journal, newsletters, its annual scientific meeting, , and the initiation of actions and reactions to various issues of concern. AAFS provides placement services as well as scientific reference studies for its members. AAFS has open membership, and serves as a main source for public information concerning the forensic science profession.

MID-ATLANTIC ASSOCIATION OF FORENSIC SCIENTISTS (MAAFS) 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.

Our membership is drawn primarily, but not exclusively, from Delaware, Maryland, Pennsylvania, Virginia, West Virginia, and the District of Columbia. We have five types of membership status: Charter, Regular, Emeritus, Corresponding members (all with equal voting privileges), and Student Associates.

INTERNATIONAL ASSOCIATION OF IDENTIFICATION (IAI) www.theiai.org

The IAI is representative of its members whom reside in numerous countries around the world. Members of the IAI, along with the IAI officers, committees, subcommittees, staff, and corporate partners all play a crucial role in the association.

With this diverse membership come individuals from many different forensic disciplines, as well as numerous law enforcement agencies, that encompass the sole purpose of the IAI's existence. Our members range from the beginning forensic examiners or law enforcement officers to seasoned and experienced forensic experts and law enforcement officers. Many of our members are certified in their respective forensic field(s) and have received their certification from the IAI through a series of written and oral examinations. Our members represent the public, the private and government professions encompassing forensic science and law enforcement.

The IAI screens all requests for membership against a set of pre-defined requirements. Only those individuals who meet the minimum requirements are offered a membership. The combined efforts and collective experience of these professional individuals substantiate the IAI's competency and is widely recognized by courts and other law enforcement domains around the world.

AMERICAN BOARD OF CRIMINALISTICS (ABC) www.criminalistics.com

The ABC is composed of regional and national organizations which represent forensic scientists. Each organization is entitled to one member on the ABC Board of Directors and one member on the ABC Examination Committee. The representatives from these organizations can answer any questions about the ABC, certification examinations, proficiency testing, and related issues.

ABC Certification Exams

Certification is a voluntary process of peer review by which a practitioner is recognized as having attained the professional qualifications necessary to practice in one or more disciplines of criminalistics. The ABC offers a certificate in criminalistics, as well as in the specialty disciplines of forensic biology, drug chemistry, fire debris analysis, and trace evidence.

Types of Certification

Diplomate of the ABC - Certification as a Diplomate of the ABC, denoted by the designation D-ABC, is awarded to individuals with a degree in the natural sciences, two years of forensic laboratory experience, and upon successful completion of the *General Knowledge Examination (GKE)*. The GKE is the first segment of a comprehensive certification program leading to "Fellow" (for examiners specializing in drug analysis, forensic biology (including DNA), fire debris analysis, or certain trace evidence specialty areas) or "Diplomate" (for those not seeking Fellow, i.e. lab directors, supervisors, or where Specialty Examinations are not planned immediately, e.g. explosives, soil, GSR, etc.). Certification as a Diplomate signifies that the analyst is qualified to supervise multidisciplinary examinations of physical evidence.

Fellow of the ABC - Certification as a Fellow of the ABC, denoted by the designation F-ABC, is awarded upon successful completion of the GKE and the relevant specialty examination, successful performance on a proficiency test, and a minimum of two years' experience in the specialty area. Certification as an ABC Fellow signifies that the analyst is qualified to supervise multidisciplinary evidence examinations and to conduct examinations in the specialty area.

Technical Specialist of the ABC

Certification as a Technical Specialist, denoted by the designation TS-ABC, is awarded by the ABC upon successful completion of a written examination. Prerequisites include a BS/BA in a natural science, 3 years' experience, and successful completion of a proficiency test in the last 12 months. This certification signifies that the analyst is qualified to conduct examinations in the specific fields for which the certificate is granted. Technical specialist certification is currently offered in the specialties of forensic drug analysis and forensic molecular biology.

FSAT - FORENSIC SCIENCE ASSESSMENT TEST

The Forensic Science Assessment Test (FSAT) was developed by representatives of the American Board of Criminalistics (ABC), Forensic Educators Programs Accreditation Commission (FEPAC), Council of Forensic Science Educators (COFSE) and the American Society of Crime Laboratory Directors (ASCLD). The former ABC General Knowledge Examination was the starting point for the test which was developed for students in their last semester of an academic Forensic Science program, either a graduate or undergraduate program. Results from this test can be used by students to show prospective employers their level of forensic science knowledge. Additionally, students may wish to use the test to compare their knowledge to other individuals in their peer group. Academic programs can also use the results of the examination as a measure of program assessment.

Students will receive their scores directly from the ABC. If the students sign a waiver releasing their scores to their Program Director and return the waiver to the ABC, their Program Director will receive the student's results as well. Either way, the Program Director will receive a summation of their students' scores and the institution's rank compared to other institutions participating in this year's examination. Scores will be available in June and January of each year.

The test consists of 220 multiple-choice questions (a few multiple multiple-choice) of which 200 will be scored. The remaining 20 questions are being piloted for future FSAT examinations. Three hours are allowed to finish the test. Questions cover all disciplines in a crime laboratory plus the areas of law, ethics, safety and photography. The areas of Forensic Molecular Biology, Trace Evidence, Drug Analysis, Toxicology, Fingerprints, Questioned Documents and Firearms/Toolmarks will be scored independently as a percentage and a rank across all other scores for the semester, as well as a part of the total score. This is not a pass/fail test. A numerical score out of a possible 1200 points will be

provided to the student. The FSAT is given at each participating academic institution and administered by the program director or another faculty member.

Study Guide for the FSAT Examination

Please note that this study guide will be updated periodically. Check for www.criminalistics.com for updates.

Guide as of 08/07/2013

Introduction

ABC Code of Ethics is an essential component of the FSAT exam.

Your study guide consists of a Job Description, a list of Knowledge, Skills, and Abilities (KSAs), References, and 50 Sample Question primer for the examination.

- The Job Description describes the education and background for student candidates.
- The KSAs have ten major sections. Sections I-IX covers the core knowledge and skills expected of student candidates. Section X, consisting of the specific, discipline related, in-depth, upper level knowledge, skills, and abilities. Please note that the sub-categories listed under the capital letters in the KSAs are examples and are not meant to be all-inclusive, or to indicate that there will necessarily be a question on the examination from every sub-category.
- The References are broken into core references and discipline-related references. The core references are identical for all the ABC examinations. The discipline related references are specific to each discipline.
- There are fifty Sample Questions to give you an idea of the range of content and difficulty that will appear on the examination. For further information, please see "Introduction to ABC Certification Examinations."

Job Description

The student must be enrolled in a forensic science educational program. This examination is designed for graduating seniors and graduate students.

A qualified student candidate must be able to:

- Understand the major scientific principles behind forensic science analysis.
- Understand how to recognize, collect, secure, and preserve physical evidence.
- Understand how to perform physical, chemical, and/or biological analyses to locate and identify items having evidential value.
- Understand how to interpret and compare analytical data generated from the analyses of physical/chemical evidence and known exemplars.
- Understand how to recognize the potential for forensic examinations in areas outside an area of specialization, prioritize the sequence of examinations, and handle evidence accordingly.
- Evaluate the appropriateness and/or the appropriate method of securing samples.
- Understand the use of laboratory instrumentation.
- Observe safe practices to ensure the safety of analysts.
- Understand legal processes including courtroom testimony, relevant legal decisions and concepts.
- Recognize and employ quality assurance measures to ensure the integrity of the analyses.
- Understand the importance of impartial and ethical work practices.

KNOWLEDGE, SKILLS, AND ABILITIES (KSA)

I. History
   - A. Evolution of practice (past practices)
   - B. Significant historical figures (e.g., Locard, Gross, Orfila, Kirk)

II. Crime Scene Preservation
   - A. Securing
   - B. Isolating
   - C. Recording
   - D. Searching
   - E. Recognition of evidentiary value
   - F. Safety

III. Crime Laboratory Operations – Overview
   - A. Laboratory Disciplines
     1. Forensic biology
     2. Controlled substances
     3. Trace analysis
     4. Toxicology
     5. Latent fingerprints
     6. Questioned documents
     7. Fire debris
     8. Firearms/Toolmarks
     9. Digital evidence

IV. QA/QC
- A. Accreditation, Certification, Standardization
  1. Laboratory accreditation
  2. Personnel certification
  3. Standardization
- B. QA/QC Application
  1. Definitions
  2. Validation and verification
  3. Controls and standard reference materials
  4. Proficiency Testing
- C. Document/Data Management
  1. Databases
  2. Case document preservation/integrity

V. Safety
- A. Chemical Hygiene
  1. Safety labeling (MSDS)
- B. Universal Precautions
  1. Blood borne pathogens
  2. Person protective equipment
- C. Hazardous Waste/Biohazardous Waste Handling
  1. Spill control

VI. Legal
- A. Decisions/laws
  1. Frye
  2. Daubert and related decisions
- B. Legal terminology
  1. Subpoena, deposition
- C. Court Testimony
  1. Voir dire/qualification
  2. Expert witness
- D. Procedural Law
  1. Search and seizure (4th Amendment)
  2. Discovery

VII. Ethics
- A. Professional Ethics
  1. Conflict of interest
  2. Professional integrity
  3. Objectivity
  4. Professional obligations

VIII. Evidence Handling
- A. Evidence Recognition and Collection
  1. Prioritization based on circumstance
  2. Sampling
- B. Evidence Characteristics (Class/Individual)
  1. Identification
  2. Primary, secondary transfers
  3. Visible vs. latent evidence
- C. Evidence Preservation and Integrity
  1. Chain of custody
  2. Alteration/degradation
- D. Evidence Packaging
  1. Proper sealing
  2. Types of packaging

IX. General Science Terms and Principles
- A. Definitions and applications
  1. Scientific Method
  2. Microscopy
  3. Instrumentation
- B. General Chemistry Concepts
  1. Nomenclature (IUPAC)
  2. Type of molecules (e.g., aromatics, isoalkanes)
  3. Atomic, molecular weights
  4. Acids/bases
  5. Periodic Table
  6. Elemental Composition
  7. Bonding
- C. General Biology Concepts
  1. Cell structure
  2. Genetics
  3. Characteristics of body fluids
- D. General Physics Concepts
  1. Energy
  2. Electromagnetic spectrum
  3. Force
- E. General Physiology and Anatomy Concepts
- F. General Statistics
  1. Central tendency
  2. Variation
  3. Population characteristics
- G. Stoichiometry
- H. Logic
- I. Metric System
  1. Metric to metric conversion
  2. Metric to English conversion

X. Theory and Application
- A. Forensic biology
  1. Analytical Techniques
  2. Instrumentation
  3. Data Interpretation
- B. Controlled substances
  1. Analytical Techniques
  2. Instrumentation
  3. Data Interpretation
- C. Trace analysis
  1. Analytical Techniques
  2. Instrumentation
  3. Data Interpretation
- D. Toxicology
  1. Analytical Techniques
  2. Instrumentation
  3. Data Interpretation
- E. Latent fingerprints

1. Analytical Techniques
2. Instrumentation
3. Data Interpretation

F. Questioned documents
1. Analytical Techniques
2. Instrumentation
3. Data Interpretation

G. Fire debris
1. Analytical Techniques
2. Instrumentation
3. Data Interpretation

H. Firearms/Toolmarks
1. Analytical Techniques
2. Instrumentation
3. Data Interpretation

I. Pattern evidence
1. Analytical Techniques
2. Instrumentation
3. Data Interpretation

REFERENCES

Techniques of Crime Scene Investigation, 7th Edition, by Fisher, B.J. (Boca Raton: CRC Press, 2004) ISBN 0-8493-1691-X.
Criminalistics, An Introduction to Forensic Science, 7th Edition (or higher), by Saferstein, R. (Upper Saddle River, NJ: Prentice Hall, 1998) ISBN 0-13-592940-7.
Forensic Science Handbook, Volume I, 2nd Edition, edited by Saferstein, R. (Englewood Cliffs, NJ: Prentice Hall, 2002) ISBN 0-13-091058-9.
Forensic Science Handbook, Volume II, 2nd Edition, edited by Saferstein, R. (Englewood Cliffs, NJ: Prentice Hall, 2005) ISBN 0-13-112434-X.
Forensic Science Handbook, Volume III, edited by Saferstein, R. (Englewood Cliffs, NJ: Prentice Hall, 1993) ISBN 0-13-325390-2.
Fundamentals of Forensic Science, by Houck, M., Siegel, J. (Burlington, MA: Elsevier Academic Press, 2006) 0-12-356762-9.
Forensic Chemistry, by Bell, S., (Upper Saddle River, NJ: Pearson Prentice Hall, 2006) ISBN 0-13-147835-4.
"The Rule of Professional Conduct" supplied by the American Board of Criminalistics.
Forensic DNA Typing, by Butler, J. (San Diego, CA: Academic Press, 2001) ISBN 0-12-147951-X

For further information:

Certification is but one of the avenues for improving the professional status of those conducting analyses in criminalistics. To become a part of this program, contact the ABC Registrar, P. O. Box 1358, Palmetto, FL 34220. The The ABC will forward an application packet with information on fees, timetables, and other requirements.
www.criminalistics.com/

DIGITAL FORENSICS CERTIFICATION BOARD CERTIFICATION (DFCB)

http://www.dfcb.org/certification.html

STEPS TO DFCB CERTIFICATION

DFCB certification requires a number of steps. It is the applicant's responsibility to complete each of these steps in a timely manner. If an applicant's application remains dormant for one month or more, DFCB will send an email notice that the application appears to be abandoned. If, following this notice, DFCB is not provided a valid reason for the inactivity within two weeks, the application will be considered abandoned and DFCB will purge its files accordingly.

1) Applicants must submit a notarized affidavit and certification. Once applicant has provided the required personal information and included the notarized the certification, this completed form should be faxed to the DFCB at 407-823-0155.
2) Applicants should review all information on the DFCB website regarding certification. Note that significant experience, training and education are required. Note also that a background check will be conducted. References will also be required to verify experience. Finally, there is a $100 Test Fee (non-refundable) and a $250 Application Fee.
3) Go to online to (https://www.dfcb.org/dfcbapplication/login/default.aspx) where you will see an Assessment button. Click on this and an assessment is presented where applicants can enter their training, experience and education. Points are given for various aspects, and an Applicant must have at least 100 points in order to continue with the certification process. Applicants are cautioned that documented support will be required for all claimed education, training and experience. If Applicant accumulates 100 points or more, the Applicant is allowed

to start the application process by registering, including entering a user name and password. This user name and password will allow the applicant to log in to his or her DFCB application, complete work experience details, training details, upload supporting documentation, etc.

4) Applicant will receive an email from DFCB, verifying that applicant has been entered into the DFCB system.
5) Applicant should then wait until the DFCB Applications committee has been able to make a preliminary review of the applicant's assessment. Note that this review is only to verify that the applicant entered information properly. DFCB will make no effort to verify at this time that the applicant has, in fact, achieved the necessary training, experience and education required for certification.
6) Applicant then receives notice via email that the Assessment appears to have been entered correctly. If you have not received notice within 2 weeks, contact DFCB.
7) Applicant returns online and downloads the Signature Form, prints and signs, then uploads to online application as an "Attachment" using "Other" category.
8) Applicant downloads DFCB Test Form, prints it, provides information as required, and signs affidavit. Applicant has form properly notarized. Applicant FAXES letter directly to DFCB at fax number provided on form.
9) Applicant returns online and submits online payment of DFCB Test Fee.
10) Once completed Signature Form, DFCB Test Form, and payment of DFCB Test Fee have been received, DFCB will obtain credentials for Applicant to take the DFCB test. Credentials should be emailed to applicant about one week before the test will be available at the end of each quarter.
11) DFCB Test will be administered during the last 7 days of each quarter ended March 31, June 30, September 30, and December 31. Test may be taken at any time during this week.
12) Applicants who are successful on the test will be notified. Applicants who are unsuccessful will be allowed one opportunity to re-take the test when available the following quarter at no charge.
13) Once the Applicant successfully passes the test the Applicant goes back on line and pays DFCB Application Fee of $250.
14) Applicant receives notice to contact third-party vendor to provide required information for background check.
15) Applicant then logs back into the online application and begins completing the application including uploading documentation regarding training, experience and education.
16) In this online application the Applicants must enter information for two references. DFCB notifies references via email regarding required information.
17) Once all required information has been uploaded, Applicant submits application by hitting "Submit" button.
18) DFCB Application's committee will review application. Applicant will be notified of any deficiencies or defects. Applicant should respond in two weeks to supplement or correct such information.
19) For those applications that are complete, DFCB will notify applicant. DFCB will issue Certification certificate. Applicant will be added to the DFCB website as being certified. Applicant will be added to the DFCB listserv.

DFCO.DFCA KNOWLEDGE, SKILLS, AND ABILITIES (KSA)

Up-to-date KSAs are available on http://www.dfcb.org/certification.html.

Technical References:

Books

- Brian Carrier- File Systems and Forensic Analysis
- Eoghan Casey- Digital Evidence and Computer Crime
- Keith J. Jones, Richard Bejtlich, and Curtis W. Rose- Real Digital Forensics
- Cybercrime: The Investigation, Prosecution and Defense of a Computer-Related Crime
- Dan Farmer and Wietse Venema- Forensic Discovery
- Kevin Mandia- Incident Response and Computer Forensics
- Nelson- Guide to Computer Forensics and Investigations version 2

Guide

- SWG-DE documents
- Federal Guide on Searching and Seizing Computers
- NIJ Investigations Involving the Internet and Computer Networks
- NIJ Forensic Examination of Digital Evidence: A Guide for Law Enforcement
- NIST tool validation white paper

- NIST SP800-86- Incident Response and Computer Forensics

MUFSP STANDARD OF CONDUCT

One way in which a university is judged is through the conduct and behavior of its students. As a representative of the Forensic Science Program every student should express a courteous, cheerful, and cooperative attitude toward the public, employees, and fellow students. Tact, dependability, a cooperative attitude, team spirit, punctuality, neat appearance, efficient use of time, satisfactory work performance, and a friendly and professional demeanor are all traits which should be the hallmark of your future career. For further information on Marshall University School of Medicine's Institutional Standards of Behavior Policy, please visit: http://musom.marshall.edu/students/documents/policies/behaviorpolicyfinal.pdf.

Professional Ethics

A sound foundation in professional ethics is essential to all forensic science practitioners. Note that while a course is not dedicated to ethics, examples of ethics considerations and dilemmas are presented across the forensic science curriculum. Every forensic science student should be aware of, and knowledgeable regarding, Codes of Ethics adopted by various forensic science professional organizations. These include the a)*Code of Ethics and Conduct of the American Academy of Forensic Science (AAFS) and the American Academy of Forensic Sciences (AAFS) Good Forensic Practice Guidelines, b) The Code of Ethics of the California Association of Criminalists,(CAC) c) The Code of Ethics Enforcement of the California Association of Criminalists, d) American Society of Crime Laboratory Directors (ASCLD) Code of Ethics,* and the e) *American Board of Criminalistics (ABC) Code of Ethics. A copy of each of these is provided in this handbook.* Students are referred to other publications that focus on ethics as they apply to forensic science, such as Peter Barnett's *Ethics in Forensic Science Professional Standards for the Practice of Criminalistics*, CRC Press, 2001. In addition, each student is required to participate in a DVD presentation of *Ethics in the Forensic Sciences: Value Based Decision Making*, presented by Dan B. Gunnel, Illinois State Police, published by the Midwest Forensics Resource Center.

Appearance and Dress Code

It is the policy of the Forensic Science Program that each student's dress, grooming, and personal hygiene be appropriate for the work, laboratory, and classroom situation. Students participating in internships are expected to dress in a manner acceptable to law enforcement or other forensic-based establishments. A businesslike appearance is recommended. Skirts and shorts of an inappropriate length, soiled clothing or shoes are considered inappropriate attire for the forensic science professional. Hair should be clean and neat. Regardless of length, unkempt hair is inappropriate. Beard/mustaches should be neatly trimmed.

The Center's objective in establishing a business casual dress code is to allow our employees and students to work comfortably in the workplace. Yet, we still need our employees and students to project a professional image for our customers, potential employees, and community visitors. Business casual dress is the standard for this dress code.

Because all casual clothing is not suitable for the Center, these guidelines will help you determine what is appropriate to wear to work or class. Clothing that works well for the beach, yard work, dance clubs, exercise sessions, and sports contests may not be appropriate for a professional appearance at work or in the classroom.

Clothing that reveals too much cleavage, your back, your chest, your stomach, your underwear, tattoos, or multiple piercings is not appropriate for a place of business, even in a business casual setting.

Clothing that has the Center's logo is encouraged. Sports team, university, and fashion brand names on clothing are generally acceptable but should not be overdone.

Slacks, Pants, and Suit Pants

Khaki slacks or jeans that provide a neat, professional appearance are acceptable. Torn, dirty, or frayed clothing is unacceptable. Discouraged slacks or pants include frayed or torn jeans, sweatpants, exercise pants, Bermuda shorts, short shorts, shorts, bib overalls, leggings, and any spandex.

Skirts, Dresses, and Skirted Suits

Casual dresses and skirts, and skirts that are split at or below the knee are acceptable. Dress and skirt length should be at a length at which you can sit comfortably in public. Short, tight skirts that ride halfway up the thigh are inappropriate. Mini-skirts, skorts, sun dresses, beach dresses, and spaghetti-strap dresses are inappropriate.

Shirts, Tops, Blouses, and Jackets
Casual shirts, dress shirts, sweaters, tops, golf-type shirts, and turtlenecks are acceptable attire for work. Most suit jackets or sport jackets are also acceptable attire if they violate none of the listed guidelines. Attire that is discouraged includes midriff tops; shirts with potentially offensive words, terms, logos, pictures, cartoons, or slogans; halter-tops and tops with bare shoulders.

Shoes and Footwear
Conservative athletic or walking shoes, loafers, clogs, sneakers, boots, flats, dress heels, and leather deck-type shoes are acceptable. Wearing no stockings is acceptable in warm weather. Flashy athletic shoes, thongs, flip-flops, or slippers are not acceptable. Closed toe and closed heel shoes are required in the laboratory.

Nails
Nails should be neat and clean. When used, nail polish should be confluent (single color) with the appearance of being polished and professional. Ill-kept, chipped, or multi-colored nails are discouraged.

Jewelry, Makeup, Perfume, and Cologne
Should be in good taste, with limited visible body piercing and tattoos.

Hats and Head Covering
Head covers that are required for religious purposes or to honor cultural tradition are allowed.

Failure to Comply
Should it be necessary for action to be taken against a student due to noncompliance, the student will receive a verbal warning (first offense) prior to a written warning (second offense). Should a third offense of similar nature occur a formal complaint will be prepared for review by the Forensic Science Graduate Committee. All occurrences and remedial actions will be documented, discussed and signed by the student, and placed in the student's file.

Marshall University Plagiarism Policy
Reference: Marshall University Student Handbook, http://www.marshall.edu/student-affairs

1. About Plagiarism
The purpose of this policy is to explain plagiarism through examples and definitions. Plagiarism is a form of academic dishonesty that you should avoid because it may lead to a failing grade or academic expulsion. The penalties for unintended, or accidental, plagiarism are the same as for intentional planned plagiarism. Like many academic institutions, Marshall University makes use of software that checks if material submitted by students has already been published on the web. Marshall professors are familiar with the published journal literature in their respective field. Since they read multiple student papers, Marshall professors are very good at recognizing recycled papers and professionally prepared and purchased papers. A finding of academic dishonesty is filed in the Office of Academic Affairs and copied to the student's department and college. Plagiarism is not worth the risk.

2. Marshall University's Plagiarism Policy *(as stated in the Graduate Handbook)*

Plagiarism: *Submitting as one's own work or creation any material or an idea wholly or in part created by another. This includes:*

- *Oral, written and graphical material*
- *Both published and unpublished work*

It is the student's responsibility to clearly distinguish their own work from that created by others. This includes the proper use of quotation marks, paraphrase and the citation of the original source. Students are responsible for both intentional and unintentional acts of plagiarism.

3. How Students Can Avoid Plagiarism

- Always give credit whenever you use:
    - an idea or theory created by another person
    - any information like facts, statistics or drawings that are not common knowledge
    - a quotation of another persons' words
    - a paraphrase of another persons' words
- Place in quotations everything that is copied directly from a source, even when you are taking notes.
- Paraphrase, but make sure you do more than simply rearrange the original sentences and replace a few of the words.
- Check what you have written to be certain you have not borrowed words and/or phrases from the original source.

Academic Misconduct

As described in the Marshall University Creed, Marshall University is an "Ethical Community reflecting honesty, integrity and fairness in both academic and extracurricular activities."

Academic Dishonesty is something that will not be tolerated as these actions are fundamentally opposed to "assuring the integrity of the curriculum through the maintenance of rigorous standards and high expectations for student learning and performance" as described in Marshall University's Statement of Philosophy.

A student, by voluntarily accepting admission to the institution or enrolling in a class or course of study offered by Marshall University accepts the academic requirements and criteria of the institution. It is the student's responsibility to be aware of policies regulating academic conduct, including the definitions of academic dishonesty, the possible sanctions and the appeal process.

For the purposes of this policy, an academic exercise is defined as any assignment, whether graded or ungraded, that is given in an academic course or must be completed toward the completion of degree or certification requirements. This includes, but is not limited to: Exams, quizzes, papers, oral presentations, data gathering and analysis, practical and creative work of any kind.

Definitions of Academic Dishonesty

Below are definitions of some common types of academic dishonesty. Each instructor may modify the general definition of academic dishonesty to fit the immediate academic needs within that particular course of study, provided the instructor defines, in writing and preferably in the course syllabus, the details of any departure from the general definition.

Cheating: Any action which if known to the instructor in the course of study would be prohibited. This includes:

- The unauthorized use of any materials, notes, sources of information, study aids or tools during an academic exercise.
- The unauthorized assistance of a person other than the course instructor during an academic exercise.
- The unauthorized viewing of another person's work during an academic exercise.
- The unauthorized securing of all or any part of assignments or examinations, in advance of submission by the instructor.

Fabrication/Falsification: The unauthorized invention or alteration of any information, citation, data or means of verification in an academic exercise, official correspondence or a university record.

Plagiarism: Submitting as one's own work or creation any material or an idea wholly or in part created by another. This includes:

- Oral, written and graphical material.
- Both published and unpublished work

It is the student's responsibility to clearly distinguish their own work from that created by others. This includes the proper use of quotation marks, paraphrase and the citation of the original source. Students are responsible for both intentional and unintentional acts of plagiarism.

Bribes/Favors/Threats: Attempting to unfairly influence a course grade or the satisfaction of degree requirements through any of these actions is prohibited.

Complicity: Helping or attempting to help someone commit an act of academic dishonesty.

Sanctions
Sanctions for academic dishonesty may be imposed by the instructor of the course, the department chairperson, or the Academic Dean. Sanctions for academic dishonesty may be imposed even if a student withdraws from an individual course or from the university entirely. The instructor may impose the following sanctions:

- A lower or failing project/paper/test grade
- A lower final grade
- Failure of the course
- Exclusion from further participation in the class (including laboratories or clinical experiences)

The following sanctions may be recommended by the instructor but will need to be imposed by the department chair, academic dean or the Office of Academic Affairs:

- Exclusion from an academic program
- Academic probation for up to 1 year
- Academic suspension for up to 1 year
- Dismissal from the university.

In those cases in which the offense is particularly flagrant or where there are other aggravating circumstances, additional, non-academic, sanctions may be pursued through the Office of Judicial Affairs.

A student will be informed in writing by the instructor or responsible office, of any charges and subsequent sanctions imposed for academic dishonesty (See "Reporting" below). Written notification of academic dishonesty charges (and the inclusion of confirmed charges/sanctions in a student's records) is designed to inform a student of the potential repercussions of repeat offenses and his/her rights of appeal.

If a student believes that charges of academic dishonesty have been erroneously levied, he/she should appeal such charges in accordance with the process outlined below (See "Appeals Process"). Sanctions for repeated academic dishonesty offenses will be imposed by the Office of Academic Affairs after consultation with the appropriate department chairs and deans.

- A student's record of academic dishonesty offenses will be maintained throughout their enrollment at Marshall University, and the period of time between offenses may have no impact on sanctions for repeated offenses.
- A student with a second academic dishonesty offense during his/her enrollment at Marshall University will be academically suspended for a period of time not to exceed one academic year (to include summer terms).
- A student with a third academic dishonesty offense during his/her enrollment at Marshall University will be dismissed from the university.

Reporting:
Any time an accusation of academic dishonesty is made, and a sanction imposed (or a sanction will be imposed with the submission of final grades), a notice should be sent to the Office of Academic Affairs within ten (10) days of the accusation.

Notice of an act of academic dishonesty will be reported to the Office of Academic Affairs through the completion of an "Academic Dishonesty Report Form."

The "Academic Dishonesty Report Form" will include:

- Instructor's Name
- Course Information (Term, Number, Section)
- Student's Name
- Student's University Identification Number
- Brief Description of the Charge

- Date of Accusation
- Brief Description of the Sanction

Instructors are encouraged to give a copy of the "Academic Dishonesty Report Form" to a student accused of an offense. However, within ten (10) days of receipt of the "Academic Dishonesty Report Form" the Office of Academic Affairs will inform the student and the student's dean of the accusations made, the sanctions prescribed, the repercussions of repeat offenses, and his/her rights of appeal.

A copy of the report will go into the student's college file. Any subsequent actions taken (additional sanctions imposed, the lessening of sanctions, the withdrawal of accusations, the results of appeals, etc.) should be reported to the Office of Academic Affairs within ten (10) days of the action.

Recording:
The Office of Academic Affairs will maintain a file of academic dishonesty incidents. These will be reported in summary form (no student or faculty names will be included) to the Academic Deans and the Faculty Senate at the end of each academic year.

Appeals Process:
In cases where the instructor imposes sanctions and does not refer the matter to the department chairperson for additional sanctions, the student may appeal the sanction in accordance with the procedures described for grade appeal (see listing under "Academic Appeals," A). This includes lowered grades, exclusion from class activities and failure of the course.

If allegations of academic dishonesty are referred to the department chairperson for additional sanctions, it must be within thirty (30) days from the date of the alleged offense. This process starts with the dean if there is no department chairperson.

a. The department chairperson shall bring together the student involved, and the faculty member, and/or other complainant within ten (10) days from the date of referral.

b. If the student denies guilt or disagrees with the sanction imposed, or if the faculty member, other complainant, or chairperson feels that the penalties are insufficient for the act complained of, the case shall be forwarded in writing by the chairperson to the student's Academic Dean within ten (10) days from the date of the meeting. The Academic Dean shall bring together the student, faculty member or other complainant, and the department chairperson to review the charges within ten (10) days from the date of referral. The Academic Dean may impose any sanction permitted by this policy.

c. Should the student, faculty member, or other complainant be dissatisfied with the determination of the Academic Dean, the case may be appealed in writing within ten (10) days of the Dean's written decision to the Budget and Academic Policy Committee, who shall refer the case to the University Academic Appeals Board for resolution.

d. Should the student, faculty member, or other complainant be dissatisfied with the determination of the Academic Appeals Board, then he/she may file an appeal with the Provost and Senior Vice President for Academic Affairs within thirty (30) days from the receipt of the written decision of the Board. The decision of the Provost and Senior Vice President for Academic Affairs shall be final.

Only individual allegations of academic dishonesty may be appealed. If a previous offense was not appealed within the time limit, or was appealed unsuccessfully then subsequent offenses will be counted as repeat offenses and additional sanctions will be levied by the Office of Academic Affairs as described under the section on "Sanctions".

Sexual Harassment

Marshall University does not tolerate sexual harassment, defined in policy as any unwelcome sexual advances, requests for sexual favors, or other verbal or physical conduct of a sexual nature when:

- Submission to such conduct is an explicit or implicit condition of employment;

- Submission to or rejection of such conduct is used as the basis for employment decisions;
- Such conduct has the purpose of 1) unreasonably interfering with an individual's work or educational performance, or 2) creating an intimidating, hostile or offensive work or educational environment.

What is Sexual Harassment?

Harassment of any kind is bothersome, demeaning, irritating, and annoying behavior. Sexual harassment is specifically harassment of a sexual nature. Disrespectful or offensive sexual behavior by faculty, staff or students is inappropriate and, in some cases, may be an abuse of authority. The involved parties can be men or women; supervisors, subordinates or peers. We all suffer when abusive and demeaning behavior is tolerated in our workplaces and classrooms. To eliminate sexual harassment, we need to understand it.

Objectives of this Course

The primary goal of this course is to enable you to identify sexual harassment behaviors. With this knowledge, you can help keep Marshall free of sexual harassment.

How to Use this Course

This course is designed for people in an educational setting. It is **not** intended to make anyone a lawyer.The course is intended to make you think about what behaviors on campus might be considered sexual harassment so you can avoid and take action against any such behaviors.

Sexual Harassment is a Behavior

Sexual harassment is a behavior, and adults are responsible for their own behavior and its consequences. We each have the responsibility to treat others with respect. If you stay aware of your responsibility and assert your rights to a respectful educational and work environment, you will have taken an important step toward eliminating sexual harassment at Marshall University.

Will This Course Change Behavior?

You need more than knowledge to change behavior. You need to recognize the likely consequences of your behavior and base your actions accordingly. The balance of risks and rewards is heavily stacked against offenders. Many people have lost their jobs, faced disciplinary actions and ruined their careers by engaging in sexual harassment. In this program, you will learn about making choices to avoid the high risks of sexual harassment. You will learn to recognize and avoid behaviors that are not acceptable. You will also learn what to do if you encounter unwelcome conduct of a sexual nature.

1998 Supreme Court Decisions

Sexual harassment has been the subject of many lengthy and expensive lawsuits, suggesting it may be complicated to define and understand. The following offers an overview of some of the important decisions that have formed the current basis of sexual harassment law in employment and academic situations. For more detailed information, please follow the optional highlighted links.

1998 Supreme Court Decisions on Employer's Liability

As a result of those decisions, under federal law, an employer is legally responsible to a victimized employee for sexual harassment by a supervisor with authority over that employee in two instances.

1. When the harassment leads to a tangible employment action, such as demotion, decreased compensation, significantly different work assignments, or termination, the employer's liability is absolute.
2. When there has been no tangible employment action, the employer is liable unless it can prove that
    - it has taken reasonable care to prevent and correct promptly any sexually harassing behavior (such as widely disseminating an effective policy and complaint procedure) and
    - the employee "unreasonably failed to take advantage of any preventive or corrective opportunities provided by the employer or to avoid harm otherwise."

1998 Supreme Court Decisions

Faragher v. City of Boca Raton

Employer Liability

The first case (*Faragher v. City of Boca Raton*) involved female lifeguards who had been repeatedly harassed over several years with offensive touching and foul comments by their supervisors. The Supreme Court found their employer, the City of Boca Raton, liable for the misconduct of its supervisory employees, in part because it had failed to disseminate its policy against sexual harassment to beach employees. The Court found that Ms. Faragher had no complaint procedure to follow, and that she and others had been discouraged by a male lifeguard training captain from reporting further up the city's chain of command.

Employer Liability

Burlington Industries v. Ellerth

The second case (*Burlington Industries, Inc. v. Ellerth*) involved a woman who felt compelled to quit her job after enduring 15 months of boorish and offensive remarks, physical advances, and propositions by a middle-management executive. The Court agreed that the supervisor's conduct constituted actionable sexual harassment, and sent the case back to the lower court to decide whether the company could prove that it had a well-publicized sexual harassment policy against such conduct and that the employee unreasonably failed to take advantage of the policy.

Employer Liability

Taken together these U.S. Supreme Court decisions hold employers responsible for their supervisors' sexually harassing behaviors in the workplace. They also hold employees responsible for reporting offensive behavior in accordance with the employer's policy and complaint procedure if the policy and procedures have been well publicized and fairly and consistently enforced by the employer.

Faragher/Ellerth Affirmative Defense

In its 1998 decisions in the Faragher/Ellerth cases, the U.S. Supreme Court held that if, and only if, no tangible employment action occurred as part of the harassment of an employee by a supervisor, the employer can assert, in Federal court, an affirmative defense to a sexual harassment claim if it can show: (a) that it exercised reasonable care to prevent and correct promptly any sexually harassing behavior, and (b) that the employee unreasonably failed to take advantage of any preventive or corrective opportunities provided by the employer or to avoid harm otherwise.

2004 Supreme Court Decision

Employer Liability in Federal Cases

Pennsylvania State Police v Suders

In June 2004, the U.S. Supreme Court held that an employer has no legal recourse when its supervisor's unlawful harassment includes an "official act" that causes an employee to quit (constructive discharge). Examples of such an official act may include "a humiliating demotion, extreme cut in pay, or transfer to a position in which the employee would face unbearable working conditions." However, if the hostile work environment did not include an "official act" on the part of the supervisor, the employer can assert the defense that it is not liable for the supervisor's conduct because it exercised reasonable care to prevent and promptly correct any wrongful behavior and that the employee unreasonably failed to take advantage of complaint procedures or other preventive opportunities provided by the employer.

Constructive Discharge

The question in what is called a "constructive discharge" has traditionally been whether the employer, through its unlawful discriminatory behavior, made the employee's working conditions so difficult that any reasonable person would feel compelled to resign. The EEOC has adopted a 3-prong test for establishing a constructive discharge.

A complainant must show that:

1. a reasonable person in his or her position would have found the working conditions intolerable;
2. conduct which constituted prohibited discriminatory treatment created the intolerable working conditions; and
3. the complainant's involuntary resignation resulted from the intolerable working conditions.

In *Pennsylvania State Police v. Suders*, the Court generally upheld this test stating that a "constructive discharge" under Title VII occurs when a hostile work environment becomes "so intolerable that ... resignation qualifies as a fitting

response." Where the high court departed from the findings of some lower courts is in what types of actions leading to a constructive discharge result in the employer's absolute liability.

2006 U.S. Supreme Court Decision

Retaliation: *Burlington Northern & Santa Fe Railway Co v. White*

In June 2006 the U.S. Supreme Court issued an important decision dealing with retaliation against an employee who has reported or complained about sexual harassment. Sheila White, a female employee working in a railroad yard, complained about *sex discrimination*. Shortly afterward, she was reassigned to a less desirable position. The reassignment did not involve loss of wages but did include harder and dirtier work. The plaintiff filed a charge with the EEOC regarding the reassignment and another retaliation charge claiming the employer placed her under surveillance following her previous complaint. Soon afterwards she was suspended without pay for 37 days. The U.S. Supreme Court unanimously held that Burlington violated the anti-retaliation provisions of Title VII of the Civil Rights Act, stating that the reassignment of duties and the unpaid suspension would deter a reasonable person from filing a discrimination claim in the future.

Sex Discrimination

Sex (or sexual) ***discrimination*** refers to discrimination based on sex (or gender). Sexual ***harassment*** is a type of sex discrimination but it refers to harassment of a sexual nature. This may be a subtle distinction and media reports may confuse or interchange the two. What is important to remember is that both are types of discrimination based on sex, as defined by the Civil Rights Act of 1964 and the EEOC. In the case of Sheila White of Burlington Northern, she claimed discrimination based on her gender, because her colleagues thought a woman should not be doing the job she held, and that led to a change in her work duties. She did not claim sexual harassment, which is harassment of a "sexual nature" but this case is very important in its implications for retaliation against anyone who might report sexual harassment.

U.S. Supreme Court Decisions

Co-worker Harassment Liability

The Supreme Court has not addressed the standard of liability for peer sexual harassment or harassment by supervisors not directly in the line of authority over a victim. In those circumstances, lower courts have consistently held employers liable only if they knew or reasonably should have known of the sexually harassing behavior and failed to take immediate and appropriate corrective action, including ending the harassment, preventing future misconduct, and taking appropriate disciplinary action against the offending employee.

1998/99 Supreme Court Decisions

Student Harassment Liability

For several years, lower courts have held that students who are sexually harassed either by other students or by school officials, including teachers, may seek monetary damages in a suit brought pursuant to Title IX of the Education Amendments of 1972. In 1998 and 1999, the Supreme Court addressed for the first time the question of the school's responsibility for harassment by either other students or teachers.

Student Harassment Liability

Gebser v. Lago Vista Independent School District
Davis v. Monroe County Board of Education

These U.S. Supreme Court cases confirm that colleges can be held liable for student-on-student or teacher-to-student harassment when: (1) the harassment is so severe, pervasive, and objectively offensive that it can be said to deprive the victim of access to educational opportunities or benefits provided by the school, (2) the school has control over the context in which the harassment arose, (3) the school has disciplinary control over the harasser, and (4) the school had actual knowledge of the harassment and responded with deliberate indifference to the complaint.

Gebser v. Lago Vista Independent School District

On June 28, 1998, in *Gebser V. Lago Vista Independent Schools Districts*, the Court decided that a school could be held liable under Title IX for a teacher's sexual relationship with an eighth-grade student if a responsible school official (one with authority to take corrective action) had actual knowledge of the harassment and the school's response to that knowledge amounted to deliberate indifference to the teacher's misconduct.

Davis v. Monroe County Board of Education

In its May 24,1999, opinion in *Davis v. Monroe County Board of Education*, the Court held that a school can be liable for monetary damages in cases of student-on-student harassment if all of the following conditions are met:

- the harassment is so severe, pervasive, and objectively offensive that it can be said to deprive the victims of access to the educational opportunities or benefits provided by the school;
- the harasser is under the school's disciplinary authority;
- a school official with authority to address the discrimination has actual knowledge of the sexual harassment; and
- the school board is deliberately indifferent to the sexual harassment.

Other Consequences of Student Harassment

Sexual harassment of students, whether by other students, by school employees or by third parties, can also result in costly and time consuming investigations, disciplinary action against the harasser, federal review of the institution's procedures and programs, and potential loss of federal funding.

How Common is Sexual Harassment?

Sexual harassment is common throughout workplaces and campuses, in all occupations and professions, educational backgrounds, age, racial and ethnic groups, and income levels.While the majority of reported cases of sexual harassment involve a male harassing a female, such cases can also involve a female harassing a male or either men or women harassing members of their own sex. In 2009, the EEOC received 12,696 complaints at the Federal level about sexual harassment, approximately 16% of which were filed by males.

Sexual Harassment on Campus

Sexual harassment is illegal, it is harmful to the victim and it can lead to harsh consequences for offenders. The workplace and educational settings differ from the broader community, because at work and school some people have authority over others, and this authority relationship can lead to coercion. People at work and school are not as free to come and go as they are elsewhere, and since they have to work/study where they are assigned, they are entitled to an environment free of sexual harassment.

Glossary of Terms

Agent - one who acts for, or in the place of, another, by authority from him or her; one entrusted with the business of another; a substitute; a deputy. Managers and supervisors are agents of the employer.

Circuit courts - the name informally used to refer to the existing U.S. court of appeals, which are organized into thirteen circuits covering different geographical areas of the country. The term derives from an age before mechanized transit, when judges and lawyers rode “the circuit” of their territory to hold court in various places.

Coercion - the use of authority or force to impose an unwanted advance. The act of compelling by force of authority.

Common Law Torts - legal actions against civil wrongs, including assault and battery, intentional infliction of emotional distress, interference with contract and defamation. Tort actions may provide more relief than the federal and state laws.

Constructive Discharge - a legal term that means that the mistreatment or hostile conditions were so bad that the harassed employee was forced to leave work.

Discrimination - any action that unlawfully or unjustly results in unequal treatment of persons or groups based on race, color, gender, national origin, religion, age, disability or other factors protected under federal, state or local laws, such as marital status or gender identity.

Disparaging Term - a term used to degrade or connote negative statements pertaining to such characteristics as race, color, gender, national origin, religion, age, disability or sexual orientation. These terms include insults, printed material, visual material, signs, symbols, posters, or insignia. The use of these terms constitutes unlawful discrimination.

Domination - the exercise of power in ruling; arbitrary and abusive influence; to be larger in number, quantity, or importance; to be in control.

Equal Employment Opportunity Commission (EEOC) - a federal agency established in 1964 by Title VII of the Civil Rights Act. This agency is charged with eliminating discrimination based on race, color, religion, sex, national origin, disability, or age in employment.

EEOC Guidelines - In 1980 the EEOC issued guidelines which declare sexual harassment a violation of Section 703 of Title VII, set criteria for determining when unwelcome conduct of a sexual nature constitutes sexual harassment, define criteria for employer liability, and recommend steps employers should take to prevent sexual harassment. These guidelines have been updated periodically.

Empathy - the action of understanding, being aware of, being sensitive to, and vicariously experiencing the feelings, thoughts, and experience of another; the capacity for this

Fair Employment Practices - State fair employment practices agencies provide assistance in sexual harassment cases similar to the federal EEOC. Laws on sexual harassment, and other types of discrimination, vary considerably from state to state.

Gender - The behavioral, cultural, or psychological traits typically associated with a person's sex.

Harassment - The act of harassing, or state of being harassed; a feeling of intense annoyance, anxiety or worry caused by being tormented.

Hostile Work Environment - a form of sexual harassment that occurs when unwelcome sexual conduct is severe and pervasive and unreasonably interferes with an individual's job performance and creates a hostile, intimidating or offensive work environment.

Impact - The effect or consequence of an action. The impact of behavior of a sexual nature is more important than the person's intentions in determining sexual harassment.

Innuendo - an indirect or subtle, usually derogatory implication; an insinuation.

Intent - the purpose or intention of an action, from the actor's point of view. A person's good intent is not relevant in determining whether behavior may be sexual harassment.

On Notice - having received notification. Once you are "on notice" you cannot claim that you were unaware of the matter. For example, when you receive a Court Summons, you are "on notice" that you must appear as ordered, and you can't plead ignorance.

Peer - a person who is of equal standing with another in a group; one of the same rank, quality, endowments, character, etc.; an equal; a match; a mate.

Perspective - a way of regarding situations or topics. People interpret situations based on their beliefs and attitudes.

Protected Class - a group named in a law as protected from discrimination. Some protected classes include gender, race, age, and religion.

Proximity - the property of being close together; the region close around a person or thing.

Quid Pro Quo - a Latin phrase that means "something for something" or "this for that." It is one form of sexual harassment, in which an employee must submit to some form of unwelcome sexual conduct in exchange for an employment benefit, such as a promotion, or the job itself.

Reasonable Person - the standard used by courts to assess whether particular conduct is illegal by determining whether a reasonable person would find it severely or pervasively offensive under similar circumstances.

Retaliation - taking or threatening to take an unfavorable action against an individual, or withholding or threatening to withhold a favorable action that could discourage a reasonable employee from making or supporting a charge of harassment or discrimination.

Sex Discrimination - the action taken by an individual to deprive a person of a right because of their sex. Such discrimination can occur overtly, covertly, intentionally, or unintentionally.

Sexism - attitudes and beliefs that one gender is superior to another.

Sexual Harassment - any unwelcome sexual advances, requests for sexual favors, and unwelcome verbal or physical conduct of a sexual nature that occurs in the workplace. Sexual harassment is a form of gender discrimination and violates both Title VII of the 1964 Civil Rights Act as well as State discrimination laws.

Sexual Harassment (Legal Definition) - a form of sex discrimination that involves unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature when:

- Submission to or rejection of such conduct is made either explicitly or implicitly a term or condition of a person's job, pay or career, or
- Submission to or rejection of such conduct by a person is used as a basis for career or employment decisions affecting that person, or
- Such conduct has the purpose or effect of unreasonably interfering with an individual's work performance or creates an intimidating, hostile, or offensive work environment.

Strict Liability - Liability that does not require the employer to be aware of the illegal behavior. An employer is strictly liable for quid pro quo sexual harassment by any supervisor, meaning it does not have to be aware of the harassment to have liability, but, under federal law, is not strictly liable for hostile work environment sexual harassment.

Subordinate - Placed in a lower order, class, or rank; holding a lower or inferior position. In traditional hierarchical work settings, workers are subordinate to their management.

Third Party Harassment - 1) when a party or parties not sexually harassed directly but indirectly suffer the consequences of sexual harassment. 2) also, when a person who is not an employee of an organization but may subject an employee to harassment in a work setting (e.g., a client, vendor, customer, visitor); in which case the employer is responsible for stopping and preventing the harassment.

Title IX of the Education Amendments of 1972 - federal legislation that prohibits sexual harassment of students in educational programs and activities.

Title VII of the Civil Rights Act of 1964, as amended - legislation that prohibits employment discrimination based on race, color, religion, sex and national origin; including sexual harassment.

Unsolicited - not requested; not sought after.

To complete Marshall's quiz on sexual harassment, please follow this link (http://www.marshall.edu/eeoaa/Sexual_Harassment_Training/Sexual_Harassment_Training.asp)

FORENSIC SCIENCE GRADUATE STUDENT DRUG POLICY

The Forensic Science Program at Marshall University requires all students admitted to the program acknowledge that they have been made aware of the Program's drug policy. Students must recognize the importance of a drug-free lifestyle as it relates to a career in forensic science. As required by the core curriculum, students in the Forensic Science Program must complete an internship before graduating. However, many internships require drug testing and/or a polygraph assessment before a prospective intern is accepted. This is also true of many prospective post-graduate employers. Each student must read and sign the following document acknowledging this information has been provided to him/her.

No Tolerance Policy

The Forensic Science Program at Marshall University encourages all students to maintain a drug-free lifestyle to ensure they will not be denied access to internship sites or employment. Failure of a student to pass a drug test may result in embarrassment and a loss of credibility for the program. Therefore, the Forensic Science Program at Marshall University maintains a NO TOLERANCE policy toward the use of illegal drugs.

Be aware, many security and law enforcement agencies may require prospective employees to sign a statement affirming they have never used illicit substances and may require a polygraph assessment related to their statements. Also be aware, many agencies providing internships will require Forensic Science graduate students to take a polygraph test related to their drug history. If students fail said tests they may be denied internship and employment related to the Forensic Science field as well as future career opportunities.

Marshall University Drug-Free Schools and Communities Information

Purpose: To comply with Drug-Free Schools and Communities Act
Coverage: The entire University community, including students, faculty, staff, and visitors to the campus.

Standards of Conduct: (a) The unlawful manufacture, distribution, dispensing, possession, or use of illicit drugs and alcohol on Marshall University property or as part of any University function is prohibited. (b) Reporting to work, class, or any University function under the influence of alcohol or illicit drugs is prohibited.

Disciplinary Sanctions: The University will impose disciplinary sanctions on students and employees consistent with local, state, and federal laws for violation of the Standards of Conduct outlined above. All persons should be aware that violations could result in expulsion from school, termination of employment, or referral for prosecution.

> ***Federal Trafficking Penalties*** include substantial fines and imprisonment up to life.
> ***West Virginia Sanctions*** depend on the classification of the controlled substance, the particular activity involved (possession or trafficking), and whether multiple convictions are involved. Under WV law, the most severe penalties for drug violations are for possession with intent to sell. On a first offense conviction, one may receive a fine of up to $25,000 and/or imprisonment for 15 years. Sanctions for violations of state alcohol laws vary according to the severity of the offense, with the minimum vehicular violation calling for imprisonment in the county jail for 24 hours and a $500 fine.
> ***University Sanctions*** will be imposed consistent with procedures used in other disciplinary actions.

Violations of drug and alcohol standards are the most serious type, and may result in sanctions up to expulsion from the University.

Health Risks: Substance abuse and drug dependency are problems of staggering size in our society today. They are the leading causes of preventable illness and injury in the United States, and are estimated to afflict over 25 million Americans. While alcoholism may develop in anyone, it tends to first appear between the ages of 20 and 40, and is more prevalent when a family history of alcohol abuse exists. Alcoholism is a severe and lifetime disorder estimated to directly affect up to 5% of all Americans. Alcohol abuse is often characterized by one of three different patterns: (1) regular and daily use, (2) drinking large amounts of alcohol (binging) at specific or irregular times, or (3) periods of sobriety interspersed with periods of heavy drinking and intoxication. The disorder is progressive, and is usually fatal. If you recognize any tendencies toward alcohol abuse in yourself, your friends, or loved ones, please seek help as outlined below. Health risks of other drugs include:

Narcotics (including opium, morphine, codeine, heroin, and others). Physical addiction, loss of awareness, respiratory restriction, and possible death.
Depressants (including barbiturates, Quaaludes, and others). Slurred speech, disorientation, shallow respiration, and/or coma likely with overdose.
Stimulants (including cocaine, amphetamines, and others). Increased heart rate and blood pressure, possibly leading to death, increased excitation, and loss of appetite.
Hallucinogens (including LSD, "mushrooms," PCP, mescaline, and others). Illusions and hallucinations, poor perception of time and distance, psychotic and unpredictable behavior, often leading to injury and arrest. Symptoms may reappear (flashback) sometime after use.
Cannabis (marijuana, hashish, THC, others). Unrealistic euphoria, diminished inhibitions, disoriented behavior, diminished motivation, increased pulse.

Counseling and other assistance: Help is available on campus at the Student Health Education Program on the first floor of Prichard Hall, phone 696-4800. Services are free and confidential. Community resources are also available and can be accessed through the number listed above. www.marshall.edu/shep/

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA)

The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99) is a Federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education.

FERPA gives parents certain rights with respect to their children's education records. These rights transfer to the student when he or she reaches the age of 18 or attends a school beyond the high school level. Students to whom the rights have transferred are "eligible students."

- Parents or eligible students have the right to inspect and review the student's education records maintained by the school. Schools are not required to provide copies of records unless, for reasons such as great distance, it is impossible for parents or eligible students to review the records. Schools may charge a fee for copies.
- Parents or eligible students have the right to request that a school correct records which they believe to be inaccurate or misleading. If the school decides not to amend the record, the parent or eligible student then has the right to a formal hearing. After the hearing, if the school still decides not to amend the record, the parent or eligible student has the right to place a statement with the record setting forth his or her view about the contested information.
- Generally, schools must have written permission from the parent or eligible student in order to release any information from a student's education record. However, FERPA allows schools to disclose those records, without consent, to the following parties or under the following conditions (34 CFR § 99.31):
    - School officials with legitimate educational interest;
    - Other schools to which a student is transferring;
    - Specified officials for audit or evaluation purposes;
    - Appropriate parties in connection with financial aid to a student;
    - Organizations conducting certain studies for or on behalf of the school;
    - Accrediting organizations;
    - To comply with a judicial order or lawfully issued subpoena;
    - Appropriate officials in cases of health and safety emergencies; and
    - State and local authorities, within a juvenile justice system, pursuant to specific State law.

Schools may disclose, without consent, "directory" information such as a student's name, address, telephone number, date and place of birth, honors and awards, and dates of attendance. However, schools must tell parents and eligible students about directory information and allow parents and eligible students a reasonable amount of time to request that the school not disclose directory information about them. Schools must notify parents and eligible students annually of their rights under FERPA. The actual means of notification (special letter, inclusion in a PTA bulletin, student handbook, or newspaper article) is left to the discretion of each school.

For additional information or technical assistance, you may call (202) 260-3887 (voice). Individuals who use TDD may call the Federal Information Relay Service at 1-800-877-8339.

Or you may contact them at the following address:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, D.C. 20202-5920

GOOD FORENSIC PRACTICE GUIDELINES

Provided by the AMERICAN ACADEMY OF FORENSIC SCIENCES

1. Forensic scientists generally should follow the standards of their respective disciplines. They should apply with care any assessment methods, technical skill, scientific and other areas of specialized knowledge to legal issues and questions. They should always strive to do high quality work.

2. Forensic scientists should strive to keep current and maintain competence in their scientific discipline. Although competence at minimum should be a goal, forensic scientists should strive for excellence.

3. Forensic scientists should demonstrate honesty and should strive for objectivity, by examining scientific questions from all reasonable perspectives and by actively seeking all relevant obtainable data that could distinguish between plausible alternative possibilities.

4. Forensic scientists should strive to be free from any conflicts of interest. They should possess an independence that would protect their objectivity. Any potential conflicts of interest should be disclosed. Work on related cases should be avoided or discontinued if objectivity may be compromised.

5. Forensic scientists should undertake cases and give opinions only in their areas of expertise, attained through education, training, and experience.

6. Forensic scientists should attempt to identify, deter, and help eliminate unethical behavior by other forensic scientists through methods such as discussion with a colleague, education, and, if unsuccessful, by filing an ethics complaint.

7. It is essential to recognize that honest differences of opinion exist and do not imply unethical behavior by either attorneys seeking out experts with favorable opinions. Forensic scientists should not be blamed unfairly for unpopular verdicts, hones differences of opinion, or the vagaries of the legal system.

8. Passions against an opposing disagreeing expert, or personal animosity, should not constitute the basis for an ethics complaint. Ethics complaints must be made in good faith. If based primarily on passion, such ethics complaints themselves are inappropriate.

9. Forensic scientists should present their opinions of fact in concise understandable language, but care must be taken since such efforts can result in oversimplification and loss of some precision. In their efforts to communicate effectively, forensic scientists should strive to be as accurate as possible and avoid distortion. Every reasonable effort should be made to ensure that others (including attorneys) do not distort the forensic scientist's opinions.

10. Forensic scientists should strive to instill the highest ethical and scientific standards in their students and colleagues through such means as teaching, supervision, setting a good example, publications, and presentations at meetings.

11. Forensic scientists should strive for excellence and the highest degree of integrity. Forensic opinions should not be based on undisciplined bias, personal advantage, or a desire to please an employer or an attorney.

12. When forensic scientists are asked and appropriately expected to express opinions on a legal issue, they should make every effort to become familiar with the applicable legal criteria in the pertinent jurisdiction. They should take care to reach only those legal conclusions that result from proper application of the data to that legal issue.

13. Unlike attorneys, forensic scientists are not adversaries. They take an oath in court to tell the whole truth. They should make every effort to uphold that oath.

14. When a forensic scientist accepts any privileged information from an attorney, care should be taken to ensure that all such information is kept confidential and does not reach the opposing side. After accepting such

information, forensic scientists should not provide their services to the opposing side unless legally ordered to do so. Forensic scientists should alert attorneys not to make payment or provide privileged information, if they wish to retain the option to be employed by the opposing side.

Reference: Barnett, Peter D. *Ethics in Forensic Science: Professional Standards for the Practice of Criminalistics*, CRC Press, 2001, p143-144

CODES OF ETHICS

No generally accepted code of ethics for forensic scientists or criminalists exists. In this respect, students should incorporate of all the most widely publicized codes of ethics into their daily educational practice in preparation for a career in forensic science. The earliest code of ethics written for criminalists is the California Association of Criminalists (CAC). The CAC code of ethics was adopted by other organizations such as the American Board of Criminalistics, the Association of Firearms and Toolmark Examiners, and several regional forensic science organizations (ref: Barnett, P.D.., Ethics in Forensic Science, 2001, CRC press). Other codes of ethics or codes of conduct include those published by the California Association of Criminalists, American Board of Criminalists, American Academy of Forensic Sciences, American Society of Crime Laboratory Directors, and the Council for the Registration of Forensic Practitioners.

California Association of Criminalists

The Code of Ethics of the California Association of Criminalists
Adopted May 17, 1957
Revised April 11, 1958 and May 17, 1985 (section V.F)

Preamble
This Code is intended as a guide to the ethical conduct of individual workers in the field of criminalistics. It is not to be construed that these principles are immutable laws, nor are they inclusive. Instead, they represent general standards which each worker should strive to meet. It is to be realized that each individual case may vary, just as does the evidence which the criminalist is concerned, and no set of guides or rules will precisely fit every occasion. At the same time the fundamentals set forth in this Code are to be regarded as indicating, to a considerable extent, the conduct requirements expected of members of the profession and of this Association. The failure to meet or maintain certain of these standards will justifiably cast doubt upon an individual's fitness for this type of work. Serious or repeated infractions of these principles may be regarded as inconsistent with membership in the Association.

Criminalistics is that professional occupation concerned with the scientific analysis and examination of physical evidence, its interpretation, and its presentation in court. It involves the application of principles, techniques and methods of the physical sciences, and has as its primary objective a determination of physical facts which may be significant in legal cases.

It is the duty of any person practicing the profession of criminalistics to serve the interests of justice to the best of his ability at all times. In fulfilling this duty, he will use all of the scientific means at his command to ascertain all of the significant physical facts relative to the matters under investigation. Having made factual determinations, the criminalist must then interpret and evaluate his findings. In this he will be guided by experience and knowledge which, coupled with a serious consideration of his analytical findings and the application of sound judgment, may enable him to arrive at opinions and conclusions pertaining to the matters under study. These findings of fact and his conclusions and opinions should then be reported, with all the accuracy and skill of which the criminalist is capable, to the end that all may fully understand and be able to place the findings in their proper relationship to the problem at issue.

In carrying out these functions, the criminalist will be guided by those practices and procedures which are generally recognized within the profession to be consistent with a high level of professional ethics. The motives, methods, and actions of the criminalist shall at all times be above reproach, in good taste and consistent with proper moral conduct.

I. ETHICS RELATING TO SCIENTIFIC METHOD:

A. The criminalist has a truly scientific spirit and should be inquiring, progressive, logical and unbiased.

B. The true scientist will make adequate examination of his materials, applying those tests essential to proof. He will not, merely for the sake of bolstering his conclusions, utilize unwarranted and superfluous tests an attempt to give apparent greater weight to his results.
C. The modern scientific mind is an open one incompatible with secrecy of method. Scientific analyses will not be conducted by "secret processes", nor will conclusions in case work be based upon such tests and experiments as will not be revealed to the profession.
D. A proper scientific method demands reliability of validity in the materials analyzed. Conclusions will not be drawn from materials which themselves appear unrepresentative, atypical, or unreliable.
E. A truly scientific method requires that no generally discredited or unreliable procedure be utilized in the analysis.
F. The progressive worker will keep abreast of new developments in scientific methods and in all cases view them with an open mind. This is not to say that he need not be critical of untried or unproved methods, but he will recognize superior methods, if and when, they are introduced.

II. ETHICS RELATING TO OPINIONS AND CONCLUSIONS:

A. Valid conclusions call for the application of proven methods. Where it is practical to do so, the competent criminalist will apply such methods throughout. This does not demand the application of "standard test procedures", but, where practical, use should be made of those methods developed and recognized by this or other professional societies.
B. Tests are designed to disclose true facts and all interpretations shall be consistent with that purpose and will not be knowingly distorted.
C. Where appropriate to the correct interpretation of a test, experimental controls shall be made for verification.
D. Where possible, the conclusions reached as a result of analytical tests are properly verified by re-testing or the application of additional techniques.
E. Where test results are inconclusive or indefinite, any conclusions drawn shall be fully explained.
F. The scientific mind is unbiased and refuses to be swayed by evidence or matters outside the specific materials under consideration. It is immune to suggestion, pressures and coercions inconsistent with the evidence hand, being interested only in ascertaining facts.
G. The criminalist will be alert to recognize the significance of a test result as it may relate to the investigative aspects of a case. In this respect he will, however, scrupulously avoid confusing scientific fact with investigative theory in his interpretations.
H. Scientific method demands that the individual be aware of his own limitations and refuse to extend himself beyond them. It is both proper and advisable that the scientific worker seek knowledge in new fields; he will not, however, be hasty to apply such knowledge before he has had adequate training and experience.
I. Where test results are capable of being interpreted to the advantage either side of a case, the criminalist will not choose that interpretation favoring the side by which he is employed merely as a means of justify his employment.
J. It is both wise and proper that the criminalist be aware of the various possible implications of his opinions and conclusions and be prepared to weigh them, if called upon to do so. In any such case, however, he will clearly distinguish between that which may be regarded as scientifically demonstrated fact and that which is speculative.

III. ETHICAL ASPECTS OF COURT PRESENTATION:

A. The expert witness is one who has substantially greater knowledge of a given subject or science than has the average person. An expert opinion is properly defined as "the formal opinion of an expert." Ordinary opinion consists of one's thoughts or beliefs on matters, generally unsupported by detailed analysis of the subject under consideration. Expert opinion is also defined as the considered opinion of an expert, or a formal Judgment. It is to be understood that an "expert opinion" is an opinion derived only from a formal consideration of a subject within the expert's knowledge and experience.
B. The ethical expert does not take advantage of his privilege to express opinions by offering opinions on matters within his field of qualification which he has not given formal consideration.
C. Regardless of legal definitions, the criminalist will realize that there are degrees of certainty represented under the single term of "expert opinion." He will not take advantage of the general privilege to assign greater significance to an interpretation than is justified by the available data.

D. Where circumstances indicate it to be proper, the expert will not hesitate to indicate that while he has an opinion, derived of study, and judgment within his field, the opinion may lack the certainty of other opinions he might offer. By this or other means, he takes care to leave no false impressions in the minds of the jurors or the court

E. In all respects, the criminalist will avoid the use of terms, and opinions which will be assigned greater weight than are due them. Where an opinion requires qualification or explanation, it is not only proper but incumbent upon the witness to offer such qualification.

F. The expert witness should keep in mind that the lay juror is apt to assign greater or less significance to ordinary words of a scientist than to the same words when used by a lay witness. The criminalist, therefore, will avoid such terms as may be misconstrued or misunderstood.

G. It is not the object of the criminalist's appearance in court to present only that evidence which supports the view of the side which employs him. He has a moral obligation to see to it that the court understands the evidence as it exists and to present it in an impartial manner.

H. The criminalist will not by implication, knowingly or intentionally, assist the contestants in a case through such tactics as will implant a false impression in the minds of the jury.

I. The criminalist, testifying as an expert witness, will make every effort to use understandable language in his explanations and demonstrations in order that the jury will obtain a true and valid concept of the testimony. The use of unclear, misleading, circuitous, or ambiguous language with a view of confusing an issue in the minds of the court or jury is unethical.

J. The criminalist will answer all questions put to him in a clear, straight- forward manner and refuse to extend himself beyond his field of competence.

K. Where the expert must prepare photographs or offer oral "background information" to the jury in respect to a specific type of analytic method, this information shall be reliable and valid, typifying the usual or normal basis for the method. The instructional material shall be of that level which will provide the jury with a proper basis for evaluating the subsequent evidence presentations, and not such as would provide them with a lower standard than the science demands.

L. Any and all photographic displays shall be made according to acceptable practice, and shall not be intentionally altered or distorted with a view to misleading court or jury.

M. By way of conveying information to the court, it is appropriate that any of a variety of demonstrative materials and methods be utilized by the expert witness. Such methods and materials shall not, however, be unduly sensational.

IV. ETHICS RELATING TO THE GENERAL PRACTICE OF CRIMINALISTICS:

A. Where the criminalist engages in private practice, it is appropriate that he set a reasonable fee for his services.

B. No services shall ever be rendered on a contingency fee basis.

C. It shall be regarded as ethical for one criminalist to re-examine evidence materials previously submitted to or examined by another. Where a difference of opinion arises, however, as to the significance of the evidence or to test results, it is in the interest of the profession that every effort be made by both analysts to resolve their conflict before the case goes to trial.

D. Generally, the principle of "attorney-client" relationship is considered to apply to the work of a physical evidence consultant, except in a situation where a miscarriage of justice might occur. Justice should be the guiding principle.

E. It shall be ethical for one of this profession to serve an attorney in an advisory capacity regarding the interrogation of another expert who may be presenting testimony. This service must be performed in good faith and not maliciously. Its purpose is to prevent incompetent testimony but not to thwart justice.

V. ETHICAL RESPONSIBILITIES TO THE PROFESSION:

In order to advance the profession of criminalistics, to promote the purposes for which the Association was formed, and encourage harmonious relationships between all criminalists of the State, each criminalist has an obligation to conduct himself according to certain principles. These principles are no less matters of ethics than those outlined above. They differ primarily in being for the benefit of the profession rather than specific obligations to society. They, therefore, concern individuals and departments in their relationship with one another, business policies, and similar matters.

A. It is in the interest of the profession that information concerning any new discoveries, developments or techniques applicable to the field of criminalistics be made available to criminalists generally. A reasonable attempt should be made by any criminalist having knowledge of such developments to publicize or otherwise inform the profession of them.

B. Consistent with this and like objectives, it is expected that the attention of the profession will be directed toward any tests or methods in use which appear invalid or unreliable in order that they may be property investigated.

C. In the interest of the profession, the individual criminalist should refrain from seeking publicity for himself or his accomplishments on specific cases. The preparation of papers for publication in appropriate media, however, is considered proper.

D. The criminalist shall discourage the association of his name with developments, publications, or organizations in which he has played no significant part, merely as a means of gaining personal publicity or prestige.

E. The C.A.C. has been organized primarily to encourage a free exchange of ideas and information between members. It is, therefore, incumbent upon each member to treat with due respect those statements and offerings made by his associates. It is appropriate that no member shall unnecessarily repeat statements or beliefs of another as expressed at C.A.C. seminars.

F. It shall be ethical and proper for one criminalist to bring to the attention of the Association a violation of any of these ethical principles. Indeed, it shall be mandatory where it appears that a serious infraction or repeated violations have been committed and where other appropriate corrective measures (if pursued) have failed.

G. This Code may be used by any criminalist in justification of his conduct in a given case with the understanding that he will have the full support of this Association.

American Board of Criminalistics

Applicants and Diplomats of the ABC shall:

1. Comply with the by-laws and regulations of the American Board of Criminalistics (ABC).
2. Treat all information from an agency or client with the confidentiality required.
3. Treat any object or item of potential evidential value with the care and control necessary to ensure its integrity.
4. Ensure that all exhibits in a case receive appropriate technical analysis.
5. Ensure that appropriate standards and controls to conduct examinations and analyses are utilized.
6. Ensure that techniques and methods which are known to be inaccurate and/or unreliable are not utilized.
7. Ensure that a full and complete disclosure of the findings is made to the submitting agency.
8. Ensure that work notes on all items, examinations, results, and findings are made at the time that they are done, and appropriately preserved.
9. Render opinions and conclusions strictly in accordance with the evidence in the case (hypothetical or real) and only to the extent justified by that evidence.
10. Testify in a clear, straightforward manner and refuse to extend themselves beyond their field of competence, phrasing their testimony in such a manner so that the results are not misinterpreted.
11. Not exaggerate, embellish, or otherwise misrepresent qualifications, when testifying.
12. Consent to, if it is requested and allowed, interviews with counsel for both sides prior to trial.
13. Make efforts to inform the court of the nature and implications of pertinent evidence if reasonably assured that this information will not be disclosed to the court.
14. Maintain an attitude of independence and impartiality in order to ensure an unbiased analysis of the evidence.
15. Carry out the duties of the profession in such a manner so as to inspire the confidence of the public.
16. Regard and respect their peers with the same standards that they hold for themselves.
17. Set a reasonable fee for services if it is appropriate to do so; however, no services shall ever be rendered on a contingency fee basis.
18. Find it appropriate to report to the Board any violation of these Rules of Professional Conduct by another applicant or Diplomat.

American Academy of Forensic Science

Article II. CODE OF ETHICS AND CONDUCT

SECTION 1 - THE CODE: As a means to promote the highest quality of professional and personal conduct of its members and affiliates, the following constitutes the Code of Ethics and Conduct which is endorsed by all members and affiliates of the American Academy of Forensic Sciences:

A. Every member and affiliate of the Academy shall refrain from exercising professional or personal conduct adverse to the best interests and objectives of the Academy. The objectives stated in the Preamble to these bylaws include: promoting education for and research in the forensic sciences, encouraging the study, improving the practice, elevating the standards and advancing the cause of the forensic sciences.

B. No member or affiliate of the Academy shall materially misrepresent his or her education, training, experience, area of expertise, or membership status within the Academy.

C. No member or affiliate of the Academy shall materially misrepresent data or scientific principles upon which his or her conclusion or professional opinion is based.

D. No member or affiliate of the Academy shall issue public statements that appear to represent the position of the Academy without specific authority first obtained from the Board of Directors.

American Society of Crime Laboratory Directors

SECTION 2 - THE CODE: As members of the AMERICAN SOCIETY OF CRIME LABORATORY DIRECTORS, we will strive to foster an atmosphere within our laboratories which will actively encourage our employees to understand and follow ethical practices. Further, we shall endeavor to discharge our responsibilities toward the public, our employers, our employees and the profession of forensic science in accordance with the following ASCLD Code of Conduct.

2.1 No member of ASCLD shall engage in any conduct that is harmful to the profession of forensic science including, but not limited to, any illegal activity, any technical misrepresentation or distortion, any scholarly falsification.

2.2 No member of ASCLD shall use their position to impose undue pressure on an employee to take technical shortcuts or arrive at a conclusion that is not supported by scientific data.

2.3 No member of ASCLD shall discriminate against any current or prospective employee in his or her organization based on race, color, religion, national origin, sex, age, or disability.

2.4 No member of ASCLD shall engage in any conduct that is detrimental to the purpose of ASCLD as outlined in Article II of the Bylaws.

2.5 No member of ASCLD shall misrepresent his or her expertise or credentials in any professional capacity.

2.6 No member of ASCLD shall offer opinions or conclusions in testimony, which are untrue or are not supported by scientific data.

2.7 No member of ASCLD shall misrepresent his or her position or authority in any professional capacity.

2.8 No member of ASCLD shall make written or oral statements, which imply that the member is speaking on behalf of ASCLD or the Board of Directors without the permission of the President.

2.9 No individual may gain membership in ASCLD nor shall he/she retain membership if they have been convicted of a felony offense.

2.10 All members shall report, to the extent permitted by law, to the Board of Directors any potential ethics violation committed by another member of ASCLD.

Digital Forensics Certification Board Code of Ethics

DFCB Code of Ethics and Standards of Professional Conduct Version 1.1 Dec08
The Digital Forensics Certification Board ("DFCB") exists to promote public trust and confidence in the digital forensics profession. In keeping with this goal, certificants must adhere to the highest standards of ethical and professional conduct and behavior. Consequently, the DFCB has established the DFCB Code of Ethics and Standards of Professional Conduct in order to more fully set forth the conduct and behavior required for all DFCB certificants.

Certificants pledge themselves to work with integrity and professionalism. Certificants have a professional obligation to their clients and to each other that includes, without limitation, subordination of self-interest to the interest of others.

Certificants shall follow these standards and strive always to demonstrate integrity, objectivity, competence, and confidentiality.

In order to comply with the Code of Ethics and Standards of Professional Conduct, every certificant of the DFCB shall:

1. Refrain from exercising professional or personal conduct adverse to the reputation, integrity, or image of the digital forensic profession, or otherwise to the best interests and purposes of the DFCB;
2. Report to the Board any violation by one's self or another certificant of the DFCB Code of Ethics and Standards of Professional Conduct;
3. Refrain from issuing public statements that appear to represent the position of the DFCB without specific authority first obtained from the Board of Directors;
4. Acknowledge and agree to the provision of certification that any violation of the Code of Ethics and/or Standards of Professional Conduct, as determined by the DFCB in their sole discretion, shall be subject to disciplinary action including, without limitation, suspension or revocation of certification.

Code of Ethics

A Certificant of the DFCB shall:

1. not engage in, or pressure others to engage in, any conduct that is harmful to the profession of digital forensics including, but not limited to, any illegal or unethical activity, any technical misrepresentation or distortion, any scholarly falsification or any material misrepresentation of education, training, credentials, experience, or area of expertise;
2. demonstrate, at all times, commitment, integrity, and professional diligence;
3. avoid any action that could appear to be a conflict of interest;
4. comply with all lawful orders of courts of competent jurisdiction;
5. show no bias with respect to findings or opinions;
6. express no opinion with respect to the guilt or innocence of any party;
7. not disclose or reveal any confidential or privileged information obtained during an engagement without proper authorization or otherwise ordered by a court of competent jurisdiction;
8. examine and consider thoroughly all information (unless specifically limited in scope by court order or other authority) and render opinions and conclusions strictly in accordance with the results and findings obtained using validated and appropriate procedures;
9. report or testify truthfully in all matters and not knowingly make any material misrepresentation of information or otherwise withhold any information that, in so doing, might tend to distort the truth;
10. accept only engagements for which there is a reasonable expectation of completion with professional competence.

Standards of Professional Conduct

Integrity and Objectivity

1. Certificant shall treat all items and information of potential evidentiary value with the care and the control necessary to ensure their integrity.
2. Prior to accepting any engagement, certificant shall research potential conflicts of interest and shall disclose any potential conflicts of interest to prospective clients, attorneys or to their employer. Any research of potential conflicts shall include, as a minimum and without limitation, the names of the client(s), attorneys, and litigants.
3. Certificant shall maintain objectivity and independence in fulfilling their professional responsibilities and shall make full, complete and truthful disclosure of the findings to the court, board, submitting agency or client.

4. Certificant shall make no inaccurate or incomplete statements of qualification either during sworn testimony, on CVs, or to their clients or client's counsel. Certificant shall always conduct his or her self in a manner that maintains or enhances the reputation of the profession.
5. Certificant shall comply with all laws and/or any lawful order of the courts or other controlling authority, to include, without limitation, any applicable federal, national, state, provincial, or local court decisions, statutes or regulation. Prior to accepting any engagement, certificant shall research in good faith applicable local laws and/or requirements to ensure compliance.

Professional Care and Competence

1. Certificant shall be competent and shall not accept engagements for which such competence is lacking. In order to fulfill this obligation, Certificant should have sufficient understanding of the nature of the issue or dispute to the extent necessary to understand the professional requirements of the engagement including the scope of the anticipated work, any limitations thereto, and the responsibilities of all parties. If the scope, limitations, or responsibilities of the parties change materially, certificant shall communicate promptly with the client or employer to reach a new understanding. It may be possible, in some circumstances, to satisfy the requirement of professional competency by means of consultation or referral.
2. Certificant shall utilize validated and appropriate methods, techniques, standards, and controls to conduct examinations and analyses such that they could be reproduced by another qualified and competent person.
3. Certificant shall carry out their duties in a professional manner and strive to be worthy of the confidence of the public;
4. Certificant shall regard and respect their peers with the same standards that they hold for themselves;
5. Certificant shall continually strive to increase and improve their skills and knowledge and to maintain currency with advances and standards in their profession. Certificant shall complete the minimum requirements for continuing professional education and/or practice experience as required by the DFCB.
6. Certificant shall ensure that any work performed by assistants shall be adequately supervised and reviewed.
7. Conclusions and opinions shall be supported by data and information that is relevant, complete, and sufficient.

Confidentiality

1. Without proper authorization or otherwise as ordered by a court or proper controlling authority, certificant (and those working under the direction of certification) shall not disclose confidential or privileged information obtained during the course of an engagement, except as required to report or testify truthfully and fully. If a certificant becomes aware of an effort to compel or becomes legally compelled to disclose confidential or privileged information, certificant shall promptly give notice to the client or client's counsel. With respect to review by professional boards, state licensing boards, regulatory bodies or other similar bodies, such review shall not be precluded by this provision provided the reviewing organization agrees to abide by these confidentiality restrictions and provided the terms of the engagement do not prohibit such review.

GENERAL LABORATORY SAFETY RULES

Forensic Science students must observe the following general safety practices when working in Program-related laboratories. Each student should:

- Wash hands frequently, after removing gloves, and upon exiting the lab.
- Be aware of signs that point to potential dangers. Two that are found in many labs are the yellow radioactive sign, indicating that radioactive agents are either stored or used there, and the orange biohazard sign which is posted where there may be infectious agents. Avoid areas with these signs, including refrigerators and incubators, until you have checked with the laboratory safety officer.
- Wearing open-toed or heeled shoes in the lab is prohibited..
- Wear a lab coat and gloves in the lab.
- Know how to help yourself and other lab members in case of an emergency. Emergency telephone numbers are posted in the lab for use in the event of an emergency. Be aware of the first aid kit, the radiation kit, and chemical spill kits, if applicable, eyewash and safety showers before working in the lab.
- Treat all blood, body fluids, and microbes as if they are infectious.
- Perform all procedures which may cause aerosols of blood, body fluids, and microbial agents in a biological safety hood.
- Report all accidental injuries or spills immediately to your instructor or supervisor.
- File an incident report with the safety officer should you have a percutaneous injury or other injury involving blood and/or body fluid samples.
- Do not do anything you feel is unsafe.
- Do not rub eyes, touch skin, or other body parts while wearing gloves.
- Do not place any lab-contaminated items in your mouth, nose, or eyes.
- Do not remove lab coats, gloves, or other protective equipment from lab area.
- Do not store food or drinks in the lab.
- Do not work with, or in areas that work with, blood and/or body fluids until having started or completed the Hepatitis B vaccination or signed the Hepatitis B Declination Form.
- Do not eat, drink, or smoke in the lab.
- Do not apply makeup, eye drops, or contact lenses in the lab.

MUFSC LABORATORY SAFETY RULES

To see the entire MUFSC Safety Manual, please visit the electronic version at Z:\MUFSC Manuals\Safety\2009 Safety Manual.

- No open toe or heel shoes can be worn inside the laboratory.
- No short pants/skirts or shorts can be worn inside the laboratory.
- All human bodily fluids are to be considered to be pathogenic - this includes fluids that belong to a colleague.
- NO eating, drinking smoking, applying cosmetics, or handling contact lenses in laboratories.
- Make every attempt to avoid touching, scratching, or rubbing mucous membranes while in the laboratory. NEVER use a gloved hand or a lab coat to scratch an itch. Mucous membranes are an excellent route of entry for both biological and chemical hazards. The coat and gloves are worn to protect us from those hazards.
- Be familiar with the location and procedures of personal protective equipment and emergency equipment- fire alarms, fire extinguishers, chemical absorbent material, emergency eye wash, and emergency shower.
- Avoid distracting or startling others while working in the laboratory, especially when handling hazardous substances.
- Always examine the known hazards associated with the materials being used. This information is found on the manufacturer's label and on the MSDS of chemicals. Never assume that all the hazards have been identified. Exercise universal precaution by treating all chemicals as though they were hazardous when handling.
- Adhere to all MUFSC waste disposal guidelines.
- Avoid tasting or smelling any chemical.
- Avoid working alone when possible.
- Wear approved eye protection when working with ANY reagent/chemical on the open bench top.
- Change gloves OFTEN. Always inspect PPE for leaks, tears, and other damage before use.
- NO GLOVES OR LAB COATS IN THE HALLWAYS. Always remove lab coat and gloves before leaving the laboratory.
- Always wash hands before leaving the laboratory.
- No Ipods, MP3 players, or ear buds are allowed in the lab at any time.

ANNUAL TRAINING

The Marshall University Forensic Science Center in accordance with the MU School of Medicine is committed to providing state-of-the-art training for all faculty and staff. Our dedication in this training will ensure that each individual has received the necessary skills and professionalism to meet the needs of today's society. Please see the following links for annual mandatory training.

- Bloodborne Pathogens: http://crh.marshall.edu/bbp/
- Hazard Communication (Chemical & Fire Safety): http://crh.marshall.edu/hazcom/
- Sexual Harrassment: http://training.newmedialearning.com/psh/marshallu/choicerefresh.htm
- Human Subject Research Training: https://www.citiprogram.org/

The following links are optional offered lectures for professional development.

- Research Methodology & Statistics, Part 1 of 3: http://musom.marshall.edu/residents/documents/Research_Part1/index.htm
- Research Methodology & Statistics, Part 2 of 3: http://musom.marshall.edu/residents/documents/Research_Part2/index.htm

- Research Methodology & Statistics, Part 3 of 3: http://musom.marshall.edu/residents/documents/Research_Part2/index.htm

To complete the Biosafety & Chemical Safety training:

1. Go to http://muonline.marshall.edu
2. Log-in using your 901# and PIN
3. Blackboard will open. Click on the "Organizations" Tab
4. Type "safety" in the Organization Search Box. Click "Go."
5. Under the search results you will see:
   Organization ID: train_driversafety, and
   Organization Name: Safety Training
6. Beside the Organization ID: train_driversafety, click on the Down Arrow and select "Enroll."
7. On the Self Enrollment page click "Submit" then click "Ok."
8. Click on the Biosafety or Chemical Safety tab on the left-hand side of the page.
9. Click on "Bio Safety Video" or "Chemical Safety &Awareness Training.ppt" to begin the training.
10. On the first slide of the Biosafety training, enter your name as you would like it to appear on your training certificate, provided at the end of training. Instructions to receive a certificate for the Chemical Safety training are provided on the training web page.
    a. Note: You must score at least 80% on the quiz
    b. Provide your supervisor with a copy of the training certificate and keep a copy for yourself
11. After viewing the video, return to MUOnline and complete the Biosafety Quiz or Chemical Safety quiz to receive credit for completing the training in the electronic database, if desired.
    a. Note: You must score at least 80% on the quiz.

PERSONNEL REQUIREMENTS FOR CONVICTED OFFENDER DNA DATA BASING LABORATORIES, FORENSIC DNA [EVIDENCE] TESTING LABORATORIES

From the DNA Advisory Board (DAB)

Students interested in working in Forensic DNA Laboratories should be aware of specific personnel requirements listed in the U.S. Department of Justice, Federal Bureau of Investigation *Quality Assurance Standards for Convicted Offender DNA Databasing Laboratories* (http://www.fbi.gov/about-us/lab/codis/stds_offlabs), and the *Quality Assurance Standards for Forensic DNA Testing Laboratories* (http://www.fbi.gov/about-us/lab/codis/codis_quality) as follows:

LAB TYPE: FORENSIC DNA EVIDENCE TESTING LABORATORIES

Technical Manager or Leader

- *Degree Requirements:* The technical manager or leader of a laboratory shall have, at a minimum, a Master's degree in biology-, chemistry-, or forensic science -related area and successfully completed a minimum of 12 semester or equivalent credit hours of a combination of undergraduate and graduate course work covering the subject areas of biochemistry, genetics, and molecular biology (molecular genetics, recombinant DNA technology), or other subjects which provide a basic understanding of the foundation of forensic DNA analysis as well as statistics and/or population genetics as it applies to forensic DNA analysis.
- *Experience Requirements:* A technical manager or leader of a laboratory must have a minimum of 3 years of forensic DNA laboratory experience.
- *Duty Requirements:* The technical manager or leader manages the technical operations of the laboratory. Is responsible for evaluating all methods used by the laboratory and for proposing new or modified analytical procedures to be used by examiners. Is responsible for technical problem solving of analytical methods and for the oversight of training, quality assurance, safety, and proficiency testing in the laboratory.

Examiner/Analyst

- *Degree Requirements:* The Examiner/Analyst shall have at a minimum a BA/BS degree or its equivalent degree in biology-, chemistry-, or forensic science-related area and must have successfully completed college course work (graduate or undergraduate level) covering the subject areas of biochemistry, genetics, and molecular biology (molecular genetics, recombinant DNA technology, or other subjects which provide a basic

understanding of the foundation of forensic DNA analysis, as well as course work and/or training in statistics and population genetics as it applies to forensic DNA analysis.

- *Experience Requirements:* An Examiner/Analyst must have a minimum of six (6) months of forensic DNA laboratory experience, including the successful analysis of a range of samples typically encountered in forensic case work prior to independent case work analysis using DNA technology. Must have successfully completed a qualifying test before beginning independent casework responsibilities.

LAB TYPE: CONVICTED OFFENDER DNA DATA BASING LABORATORIES

Technical Manager or Leader

- *Degree Requirements* - same as above for Technical Manager or Leader
- *Experience Requirements:* same as above for Technical Manager or Leader
- *Duty Requirements:* same as above

CODIS Administrator

- *Degree Requirements:* same as above OR CODIS administrator appointed or hired on or after July 1, 2009, must be, or have been, a qualified DNA analyst. If not previously qualified as a DNA analyst in that laboratory, a minimum of three courses (biochemistry, genetics, and molecular biology) totaling at least nine semester or equivalent credit hours must be completed successfully (college- or university-defined passing grade) and coursework or training in statistics and/or population genetics.
- *Experience Requirements:* A CODIS manager shall have a working knowledge of computers, computer networks, and computer database management, with an understanding of DNA profile interpretation.
- *Duty Requirements:* Is the system administrator of the laboratory's CODIS network and is responsible for the security of DNA profile data stored in CODIS. Is responsible for oversight of CODIS computer training and quality assurance of data. Has the authority to terminate the laboratory's participation in CODIS in the event of a problem until the reliability of the computer data can be assured. The state CODIS manager has this authority over all CODIS sites under his/her jurisdiction.

Examiner/Analyst

- *Degree Requirements* - same as above Examiner/Analyst for DNA Forensic [Evidence] Labs

The Curriculum of the Forensic Science Program provides coursework developed to satisfy the DAB Guidelines as well as provide a comprehensive offering in Forensic Science. For those students wishing to meet DAB requirements and the MS Forensic Science Emphasis in DNA Analysis requirements, all courses must be taken at a graduate level.

DEA QUALIFICATIONS FOR A FORENSIC CHEMIST

The following was taken off the DEA website (www.dea.gov/job/chemist/qualifications.htm) giving the qualifications of a Forensic Chemist. Note that the various GS ratings have different requirements. A Master's is required for GS-9 which only lists appropriate academic field. Our program will meet that for those who are in the Forensic Chemistry Emphasis.

To qualify at the **GS-5** level, candidates must possess a four-year degree from an accredited college or university with a major in one of the physical sciences, life sciences, or engineering. Such course of study must have included 30 semester hours of chemistry, six semester hours of physics, and mathematics through differential and integral calculus; OR possess a combination of education and experience with course work equivalent to a major mentioned above, to include at least 30 semester hours in chemistry, plus appropriate experience, or additional education.

To qualify at the **GS-7** level, all the requirements for a **GS-5** must be met in addition to one of the following:

- One year of professional experience in or directly related to chemistry;

- Thirty semester hours of graduate study in chemistry or a closely related field;

- A 3.0 grade point average (A=4.0) or equivalent in all undergraduate courses completed (up to time of application or during last two years of undergraduate work). Standing in the upper third of the graduating class in undergraduate work;

- A 3.5 grade point average or equivalent in chemistry or closely related major field of undergraduate study (up to time of application or during the last two years of the class in undergraduate work); or

- Election to membership in one of the recognized National Honorary Societies.

To qualify at the **GS-9** level, candidates must possess a *Master's Degree in an appropriate academic discipline*. Otherwise, all ratings for higher-graded positions are based upon level of professional chemist work experience.

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STUDENT SECURITY MANUAL

Purpose
This policy is intended to provide general operating guidelines necessary to protect personnel and facilities while also ensuring authorized access to those areas and facilities necessary for the efficient performance of normal/routine duties and responsibilities. Implementation and administration of this policy is the responsibility of the Marshall University Forensic Science Center's (MUFSC) Security Officer under direction of the MUFSC Director. The current Security Officer is Ian Levstein.

Scope
This policy is intended to cover normal/routine MUFSC business under normal/routine operating conditions. There are four buildings that make up the MUFSC facility: the MUFSC main building, the Annex, the Crime Scene House, and the 3rd floor Fairfield Building. The information in Part I of this document refers only to the MUFSC main building and Annex unless otherwise indicated. Information specific to the Crime Scene House and Fairfield Building is covered in Part II of this document, where not otherwise indicated.

Security
Security at the MUFSC main building and Annex is overseen by the MUFSC Security Officer and MUFSC Director. Security at the Fairfield Building is overseen by Fairfield staff in conjunction with the MUFSC Security Officer. Security at the Crime Scene House is overseen by the MUFSC Security Officer and MUFSC Director with additional oversight provided by the Marshall University Police Department (MUPD).

Part I – Building Access Control

Definitions
Key: A device used to open conventional hardware on doors that are not part of the Passcard Access System, and which provides unlimited access to a specific space.
Passcard: A programmable electronic key card which allows a user to enter secured buildings or rooms during specific times.
Key Holder: A person to whom a key (or keys) or passcard has been issued.
Passcard Access System: A computerized system that involves programmable magnetic cards which allow access to a secured area during specific times by specific key holders.
Passcard Reader: An electronic device that reads encoded electronic identification information on the passcard and allows access to a building or secured area if the key holder has approved access.

General Policy
All MUFSC faculty, staff, and students who use a passcard to enter protected areas of the facility via use of a passcard reader, will have their movements into such areas logged by the passcard server. This is an important service provided to maintain building and office security while allowing access to authorized personnel. Keys, passcards, and security codes will be issued only to MUFSC employees and such other individuals who (1) have a substantial need to lock, unlock, or access buildings, interior doors, and gates; **and** (2) have been approved to receive a key, passcard, or security code via a properly completed ***Access Request Form*** (see Appendix A). Issued keys and passcards are State property, entrusted to key holders for their **exclusive use** and only to conduct official University business. Keys/passcards are to be returned to the MUFSC Security Officer when they are no longer needed.

Enforcement
When issued, keys are the sole responsibility of the key holder identified on the Access Request Form. The key holder is the only individual allowed to use the key/passcard and is responsible, at all times, for maintaining custody of the issued key/passcard. Failure to maintain custody of a key/passcard compromises the security of persons and property. Violation of this policy constitutes an unacceptable use of resources. Suspected or known violations must be reported to the MUFSC Security Officer. Violations may result in revocation of key/passcard privileges, and continued violations may result in dismissal. In most cases, an individual accused of a violation of this policy will be notified and have an opportunity to respond before the final determination of a sanction is made. The Director of the Forensic Science Center or designate, in

conjunction with other responsible parties, will examine the available evidence and circumstances. If a sanction is levied, the decision may be appealed in writing, within three (3) business days to the MUFSC Security Committee.

Authority
It is imperative that the rules and guidelines governing the issuance of keys and passcards, and the approval of individuals to receive keys and passcards, be clearly stated and consistently enforced.

MUFSC Security Officer: Upon receipt of a completed Access Request Form containing the key holder's signature and, where appropriate, the supervisor's signature, the Security Officer is authorized to prepare and issue the requested keys or passcards. **The MUFSC Security Officer is prohibited from issuing keys or passcards to any individual unless a properly completed Access Request Form, with appropriate signatures, is submitted.** The Security Officer has the responsibility to maintain records of all locks, keys, key codes, and key holders as well as all key transactions (issuances, replacements, deletions, etc.). The Security Officer is also responsible for collecting any and all fees as a result of lost keys or passcards, or having to re-key locks.

Key Holder's Responsibilities: Anyone to whom a key or passcard has been issued is a key holder. Once a completed Access Request Form has been submitted to the MUFSC Security Officer, the key holder will be notified by phone or email when their key/passcard is ready. From that point, key holders must pick up their key/passcard within 14 calendar days. Key holders are expressly forbidden to exchange, duplicate, or loan their key or passcard to anyone else, or to accept custody of another key holder's key or passcard. Key holders must take reasonable measures to protect their key/passcard from theft, loss or unauthorized use. Any reported inappropriate use of keys/passcards by key holders will result in the immediate confiscation of the key/passcard by the MUFSC Security Officer.

If a key is lost, the key holder must report this to the MUFSC Security Officer as soon as possible so that prompt and appropriate measures can be taken to maintain building and/or property security. A replacement key/passcard will be issued by the MUFSC Security Officer if it is deemed appropriate. In such cases, a $10.00 fee per lost key/passcard will be assessed by the Security Officer to be paid, in cash, by the key holder. Should the security of a given area be so weakened by the loss of a key or passcard, the Security Officer will determine whether there is a need for re-keying the security-compromised area. The cost of re-keying, creating and issuing new keys, updating the key database, and any other reasonable cost incurred to correct the deficiency, will be borne entirely by the key holder.

Upon termination of employment or graduation, all keys/passcards issued to a key holder must be returned to the **MUFSC Security Officer**. It is important for key holders to know that returning keys to their section leader or to anyone else other than the MUFSC Security Officer **does not satisfy this requirement.** Failure to comply with this requirement may be construed as theft of State property and appropriate action, including both legal and law enforcement action, may be initiated by the University or its agent in response. Keys/passcards that have been lost by by the student or terminating employee will be handled according to the "lost key" provisions stated above.

When terminating employees/students fail to turn in assigned keys and passcards, the MUFSC Security Officer or Director will undertake a risk assessment to determine whether re-keying doors and/or locks is necessary to restore the level of security needed. If such assessment reveals that re-keying or other actions are necessary, this information will be forwarded to the MUFSC Management Team for review and determination as to whether litigation to collect for damages is appropriate. In all cases where keys or passcards are not returned, the Security Officer will notify Human Resources so that this information is included in the terminating employee's file for use when/if the employee seeks re-employment with the University, or in the student's record and may delay graduation until restitution is made.

Other Information
Keys and passcards are the property of the State. Access to locked areas of the MUFSC is based upon need and security concerns. Whenever possible, employees and students will be issued the minimum number of keys/passcards at the appropriate security level, which will provide access to their area(s) of assignment. It is the responsibility of the key holder to report any malfunctioning locks to the MUFSC Security Officer or to the MUPD (after hours). Damaged keys and passcards must be surrendered to the Security Officer for replacement without charge.

1) The following actions are in violation of this policy:
    A. Loaning of keys/passcards without authorization;
    B. Duplication of keys;
    C. Altering of keys/passcards, locks, or mechanisms;
    D. Propping open of doors;
    E. Admitting unauthorized persons into any MUFSC building or secure area; and
    F. Failing to return keys/passcards when requested by the MUFSC Security Officer, MU Police, or upon leaving the University.
2) The Security Officer will conduct a semi-annual key/passcard audit (see appendix B). At such time, key holders will be required to produce those keys/passcards which have been issued. The audit will take place in April and October each year.
3) Passcards must not be kept on the same chain as the keys. This is a serious security violation.
4) Keys to desks and office filing cabinets are not covered under this policy.

Passcards

All MUFSC faculty, staff, and students who use a passcard to enter protected areas of the facility via use of a passcard reader, will have their movements into such areas logged by the passcard server. MUFSC faculty, staff, and students will usually receive 1 passcard. The passcard is encoded to allow access to specific areas of the facility. Depending on an individual's clearance, the passcard allows access to the Annex, secure areas of the MUFSC, and CODIS Laboratories. Passcard access is required for both the MUFSC's main building and Annex entrance doors after 5:00PM Monday–Friday, and at all hours on weekends. Passcard access to MUFSC's Main Gate is required after 6:30PM Monday–Friday, and at all hours on weekends.

There are passcard readers throughout the MUFSC main building and Annex:

A. Main Gate
B. MUFSC Main Entrance
C. West Wing Lobby Door
D. CODIS Lobby Door
E. CODIS Double Doors (to West Wing)
F. Glass Wash
G. PCR Lab
H. Prep Lab
I. Processing Lab
J. Evidence Storage
K. Laundry/Telecom/Sever Closet
L. Computer Forensics Lab
M. MUFSC Annex Main Door (Parking Lot)
N. MUFSC Annex Courtyard Door (from MUFSC main building)
O. WVSP Digital Forensics Unit, 3rd Floor Annex

Groups and time zones have been defined which allow control of secure areas by individuals:

Group Number	Card Reader	Typical User Role
1	A – O (Full Access)	Director, Security Officer, Safety Officer, Facilities Officer
2	A – K	CODIS Laboratory Staff
3	A – C	MUFSC Faculty
3	C (8:00AM–4:30PM)	Administrative GA's
4	C – E, M, N	Housekeeping and Custodial Staff
5	C – I, K (8:00AM–4:30PM)	CODIS Laboratory GA's, Interns
6	C, L (8:00AM–4:30PM)	Computer Forensic GA's
7	A – E, K – N	Computer Forensic Staff, Computer Operations Manager
8	A – C, L – O	WVSP Digital Forensic Staff

Visitors, contractors, and University maintenance staff **are required** to sign a log indicating their name, arrival time, and departure time when entering and leaving the CODIS Laboratory area. While in the CODIS Laboratory area, visitors, contractors, and University maintenance staff **are required** to be escorted at all times by an authorized MUFSC staff member.

Alarm System/Security Code – MUFSC & Annex
While students are not issued security codes, students can still use the security keypad to get help in an emergency. For both buildings, the keypad is on the wall immediately inside the main entrance door. By pressing the **blue** button (police)  and the **green** button (emergency)  at the **same time**, MUPD will be immediately dispatched to the facility. If there is an emergency and you are not near one of the entrance doors, pull the fire alarm!

Part II – Crime Scene House and 3rd Floor Fairfield Building

Purpose
To ensure that all buildings associated with the MUFSC facility are appropriately covered by policy, the Crime Scene House and 3rd floor Fairfield Building are now covered separately and include aspects not already covered above or where guidelines and/or procedures are different.

Scope
This policy covers both the Crime Scene House and the 3rd floor Fairfield Building unless otherwise indicated.

Security
Security at the CSH is overseen by the MUFSC Security Officer and MUFSC Director with additional oversight provided by the MUPD. The MUPD makes regular patrols of the CSH and, in the event of an incident, is instructed to contact the MUFSC Security Officer in accordance with the instructions in Part II. Security at the Fairfield Building is overseen by Fairfield staff in conjunction with the MUFSC Security Officer. Since the Fairfield Building as a whole is not considered Marshall University property, the MUPD does not regularly patrol that location.

Safety at the CSH
The CSH requires both keys and an alarm code for access. Because faculty and staff are not regularly located at the CSH, **safety is of prime concern** for students at that location. Between 8:00AM-4:30PM, students **must close** the rear inside door when they work at the CSH. The rear inside door locks automatically, and only those who have legitimate access will have a key. Between 4:30PM-8:00AM and on weekends, students are **not** permitted to be at the CSH alone and another MUFSC student **must** be present. **Students, faculty, and staff must exercise caution and due diligence** when going to the CSH. Parking is allowed in the alley area directly adjacent to the CSH's garage

The following precautions must be taken at all times regardless of whether or not a faculty, staff member, or other student is present:

- faculty, staff, and students must have a working cell phone with them at all times. Cell phones must not be left in a purse or with books, but must be on the individual's person at all times;
- the yard around the house and garage must be surveyed thoroughly before entering the house; if a window is broken, call MUPD at 304-696-4357 and then notify the MUFSC Security Officer;
- if the faculty/staff member or student has concerns that the house or garage has been compromised in some manner by non-MUFSC personnel, the person is specifically instructed not to enter the CSH or garage, and to notify the MUFSC Security Officer; and
- if, at any time, a faculty/staff member or student does not feel safe, the person is specifically instructed to leave the premises and/or not to enter the CSH or garage.

Safety at the Fairfield Building
Because the Fairfield Building houses a number of businesses that operate during normal business hours, it is considered more safe than the CSH, but caution should still be exercised when working at that location.

The 3rd floor Fairfield suite requires both keys and an alarm code for access. There is usually one MUFSC faculty member on-site at the 3rd floor Fairfield suite. When working alone, however, **safety is the prime concern** for students at that location. Students **must close and lock** the main office door when they work alone at the Fairfield Building. Only those who have legitimate access will have a key. **Students, faculty, and staff must exercise caution and due diligence** when going to the Fairfield Building. Parking at the Fairfield Building is allowed in any of the public, unreserved parking spaces adjacent to or behind the building.

The following precautions must be taken at all times regardless of whether or not a faculty, staff member, or other student is present:

- faculty, staff, and students must have a working cell phone with them at all times. Cell phones must not be left in a purse or with books, but must be on the individual's person at all times;
- if the faculty/staff member or student has concerns that the 3rd floor Fairfield suite has been compromised in some manner by non-MUFSC personnel, the person is specifically instructed not to enter the 3rd floor Fairfield suite; and
- if, at any time, a faculty/staff member or student does not feel safe, the person is specifically instructed to leave the premises and/or not to enter the 3rd floor Fairfield suite.

Part III – Parking: MUFSC Main Building and Annex

Purpose
To ensure that fire lanes and service areas are kept clear of parked cars in order to accommodate emergency vehicles, these guidelines are established to control parking at the MUFSC main building and Annex.

Policy
MUFSC faculty, staff, and students must park their vehicles in the designated parking areas to avoid having an offense documented and placed in their personnel file. MUFSC faculty, staff, students and visitors might also be cited by Law Enforcement for a violation. It is forbidden to park in the disabled parking space adjacent to the MUFSC main building without a State-issued license plate or placard.

Security Gate
The MUFSC security gate is scheduled to open Monday–Friday from the first valid card swiped, and will then remain open until 6:30PM, at which time it automatically closes. The security gate is closed at all hours during weekends. Vehicles parked inside the gate will automatically trigger the gate to open whenever the gate is closed; however, no pedestrian traffic is ever permitted to walk through after 6:30PM. If, under emergency circumstances, you are trapped inside the gate without a vehicle, you can exit the facility by using the key-locked gate located at the west side of the MUFSC main building next to the Annex. If you do not have a security gate key, please contact the MUFSC Security Officer or MUPD and they will assist you in exiting the facility.

Between the hours of 11:00PM and 5:00AM and at all times on weekends, the main key-locked gate for the MUFSC and Byrd Clinical Building is locked. Authorized employees are required to unlock this gate with their gate key in addition to accessing the automatic gate via passcard. If the employee is required to work overnight at the MUFSC, then they are required to lock the gate behind them.

Parking Areas
MUFSC employees are permitted to park in the following areas during business hours:

1) Gated MUFSC parking lot
2) Parking area just outside the gated MUFSC lot
3) Byrd Clinical Center parking deck (1st and 2nd levels, but never after 8:00PM)
4) West Parking Lot (adjacent to Annex)
5) Lower-level lot (between the MUFSC and Byrd Clinical Center)

Students, graduate assistants, and part-time employees are permitted to park in the following areas during normal class/business hours:

1) Parking area just outside the gated MUFSC lot

2) Byrd Clinical Center parking deck (1st and 2nd levels, but never after 8:00PM)
3) West Parking Lot (adjacent to Annex)
4) Lower-level lot (between the MUFSC and Byrd Clinical Center)

After 4:00PM, students may park in the gated MUFSC parking lot.

If an MUFSC faculty, staff, or student knows that s/he will be on the premises after 6:30PM Monday–Friday, it is recommended that the person park/repark their vehicle inside the MUFSC security fence prior to 6:30PM in order to avoid inconvenience.

Parking in loading zones and fire lanes is not allowed. The loading space/fire lane is designated along the sidewalk of the MUFSC Laboratory facility by a yellow line. If you chose to use such space, it will be reported to the MUFSC Director, and repeat offenses may be documented in your personnel file. This policy applies to all shifts, including weekends and holidays.

If you intend to park inside the gated MUFSC parking lot over the weekend or on holidays, you must notify the Security Officer. Notifying anyone other than the Security Officer **does not satisfy the requirement**. If you wish to park your car inside the gated MUFSC parking lot for an extended period of time, you must give the Security Officer a copy of your car keys in case it's necessary to move the car for any reason during that extended time. Giving your keys to someone other than the Security Officer **does not satisfy the requirement**.

Appendix A – Access Request Form

ACCESS REQUEST FORM

Return to: MUFSC Security Office W200E MUFSC West Wing	Phone: (304) 691-8966 Fax: (304) 691-8928	
Last Name:	First Name:	MI:
Social Security #:	□ Faculty □ Staff □ Student □ Other	

Access Information – Security Officer's Use Only				***MUFSC Internal Use Only***		
Building Name	Code Number☆	Security Officer's Signature	Date	*Issue #*	*Keycode*	*Date*

IMPORTANT NOTICE

All keys/passcards are the property of the State and will not be loaned, borrowed or transferred without the MUFSC Security Officer's approval. Lost or stolen keys/passcards must be reported to the MUFSC Security Officer as soon as possible.

KEY HOLDER'S AGREEMENT

By my signature below, I agree to all the following terms:

1. The key/passcard described herein remains the property of the State.
2. The key/passcard is entrusted to me for my exclusive use – I will not duplicate it, loan it, exchange it, or otherwise allow its use or possession by any other person.
3. I will report its loss, theft, or destruction immediately to my department and to the MUFSC Security Officer.
4. When I terminate employment, graduate, or no longer need this key, or upon demand by the MUFSC Security Officer, I will return it promptly, in person, and ONLY to the MUFSC Security Officer or Director.
5. If the key/passcard becomes lost, stolen, or otherwise not available for return, I agree to all the following terms:
    a. I will pay the current key/passcard replacement fee;
    b. I will, if required, pay the cost for re-keying all affected locks;
    c. Processing of payment of my retirement refund and other entitlements may be delayed;
    d. My grades may be withheld, in accordance with MU's Student Handbook;
    e. A disciplinary reprimand may be entered in my permanent personnel record;
    f. The University may bring civil or criminal proceedings against me for theft of State property.

Note: The original form will be sent to the Security Officer and copies retained by both the department and the key/passcard holder.

Key Holder's Signature	**Supervisor's Signature**	**Date**

☆Please choose from the list below.

Appendix B – Access Audit Checklist

ACCESS AUDIT CHECKLIST

Key	Access Point	Assigned	Number	Notes
1	Front Alarm Box			
5	Main Gate & Annex Gate			
7	MUFSC Front Door, Side Door, WW1/WW2			
11	Computer Forensics Lab			
12	MUFSC Interior Offices			
13	CSH Outside Rear			
14	CSH Inside Rear			
15	CSH Kitchen			
20	EW Exterior by Generator			
22	Annex: DNA Lab, Classes, Conf. Room, Stairs			
28	Annex: 3rd Floor WVSP Lab			
29	Annex: 2nd Floor DNA Lab & Office			
30	Annex: 2nd Floor Conference			
31	Annex: 2nd Floor Break Room			
32	Annex: 2nd Floor Lab & Office (215A/217A)			
33	Annex: 2nd Floor Lab & Office (219A/221A)			
34	Annex: 2nd Floor Lab & Office (223A/225A)			
50	Fairfield Building – 3rd Floor - top			
51	Fairfield Building – 3rd Floor - bottom			

A	Passcard			
B	Security Alarm Code			
	Other:			
	Other:			
	Other:			
	Other:			
	Other:			

_____ _____ _____ _____
Auditor's Signature Date Employee's Signature Date

_____ _____
Auditor's Printed Name Employee's Printed Name

FORENSIC SCIENCE RESEARCH GUIDE

Prepared by Timothy A. Balch, Reference Services Librarian

This guide (http://www.marshall.edu/forensics/files/2010/11/Forensic-Science-Research-Guide.pdf) is developed specifically for those doing research in forensic science. It provides a recommended list of resources, encompassing print materials, electronic databases, and selected Internet resources. All areas of forensic science are covered, with particular emphasis on DNA analysis, forensic chemistry, and Computer Forensics.

Because forensic science draws from a variety of disciplines--including chemistry, physics, biology, molecular biology, physical anthropology, law, computer science, criminology, pathology, engineering, psychology, and pharmacology--you may need to consult resources in those fields also.

Marshall University Forensic Science webpage is an excellent resource: www.marshall.edu/forensics.

For research help, contact Tim Balch, at 304-696-2335, or by e-mail at balch@marshall.edu.

Use MILES, the Marshall University Libraries online catalog to locate materials in the libraries. You can do a Basic Search by author, title, or subject if you have them. Or, do a Keyword Search. If you find a good book on your subject, look at the "full" record to see what subject headings are used; you can click on the heading to find other records on that subject. The following subject headings are examples of terms that can be searched:

Chemistry, Forensic	Evidence, Criminal	Forensic Scientists
Computer Crimes - Investigation	Evidence, Expert	Homicide Investigation
Crime Laboratories	Fingerprints	Interviewing In Law Enforcement
Criminal Anthropology	Forensic Ballistics	Legal Photography
Criminal Behavior	Forensic Entomology	Medical Jurisprudence
Criminal Investigation	Forensic Genetics	Murder Investigation
Criminal Psychology	Forensic Medicine	Police Questioning
Death - Causes	Forensic Pathology	Writing Identification
DNA Fingerprinting	Forensic Sciences	

For additional useful subject headings for your topic, consult the Library of Congress Subject Headings set, available in the Drinko Library Reference Collection.

For books at other libraries, search Library catalogs over the Web. Books not owned by the Marshall University Libraries may be delivered to Marshall students from other libraries using our Information Delivery Services (IDS).

National Criminal Justice Reference Service Full-Text Publications (NCJRS)
Searches the web sites for the NCJRS, U.S. Department of Justice, Office of Justice Programs, and the White House Office of National Drug Control Policy for full-text publications.

National Academies Press
Free online versions of more than 3,000 books published by the Press (you can also buy print or PDF versions). A search on "forensic" brings up titles like The Evaluation of Forensic DNA Evidence, DNA Technology in Forensic Science, and Black and Smokeless Powders: Technologies for Finding Bombs and the Bomb Makers.

Dissertation Abstracts
Doctoral dissertations and master's theses from over 1,000 institutions. Dissertations back to 1861 have bibliographic entries, those since 1980 add abstracts, and those since 1997 have 24 page previews and can be purchased in PDF format. Masters' theses are included since 1988.

Journal and Magazine Articles

The online databases and indexes listed here will provide references to articles (or in some cases full-text articles) in a wide range of periodicals, from news magazines and newspapers to scholarly and professional journals. Your librarian can help you choose the best database or index. If you are off-campus and having trouble getting in to a database, see the "Use Databases Off-Campus" page for help.

NOTE: Access to these databases is generally limited to MU students, faculty, and staff (due to our licensing agreements).

Full-Text Databases

Academic Search Premier

This comprehensive database features full text for nearly 4,600 journals (with some dating back to 1990); abstracts and indexing for over 8,000 journals; and coverage of The Wall Street Journal, The New York Times, and The Christian Science Monitor.

Hint: Because of its wide coverage, Academic Search Premier is a good starting point for articles and you should begin searching there. Remember, articles that aren't available as full-text or page-image may be available elsewhere in the Library. Use the MU Periodicals search engine to check.

Wiley Interscience

Covers over 1,000 journals, major reference works, and online books published by John Wiley and Sons, Inc., with emphasis on the sciences, medicine, and law.

Kluwer Online

Articles in a variety of disciplines, including the biological sciences, chemistry, computer and information science, law, and medicine.

Westlaw

Includes the full text of a legal encyclopedia, opinions of federal and state courts, and federal and state laws and regulations. Search by keywords or case name. Excellent source for how forensic science is actually used in legal proceedings.

JSTOR: the Scholarly Journal Archive

Provides full text access to older issues of core journals, generally back to the first issue. The latest two to five years of a journal may not be available, but this is a great source for older articles not included in such indexes as Academic Search Premier. The most useful set of journals for forensic science is the "Statistics" discipline.

Indexes and Bibliographic Databases

Unfortunately, there is no one index that covers all forensic science journals. Some journals are only in one index, some are selectively covered by several indexes, and some are only indexed on the publisher's web site; so you will need to try more than one source. The following databases and indexes will provide citation information (author, article title, periodical name, volume and issue, date) for articles, essays, book chapters, dissertations, and other materials. You can then use that information to see if the item is in the MU Libraries by searching the MILES catalog, or--if the item is not owned by us-- order it from another library using the IDS.

Medline (available from three different providers)

Produced by the National Library of Medicine, this abstracts articles from over 4,600 current biomedical journals, covering such areas as medicine, dentistry, and pre-clinical sciences. Uses Medical Subject Headings (MeSH), so start with a keyword search and look at the records to find appropriate subject headings. (Very limited number of full-text articles in the PubMed version.)

Biological Sciences

Abstracts and citations (back to 1982) from over 6,000 sources (journals, conference proceedings, reports, and books) in biomedicine, biotechnology, zoology, and related fields.

Basic BIOSIS
Covers over 350 basic core life science journals aimed at undergraduate non-biology majors; includes both scholarly and popular titles. Database has current year and most recent four years, updated monthly.

TOXLINE
Abstracts and citations from almost 300 sources (journals, conference proceedings, reports, and books) in toxicology, back to 1999.

Government Periodicals Universe
Covers about 170 titles of substantial research value published by the U.S. government (such as the FBI, Executive Office for U.S. Attorneys, and Air Force Research Laboratory). Updated quarterly.

National Criminal Justice Reference Service Abstracts Database (NCJRS)
More than 180,000 criminal justice publications are included. Documents published by NCJRS sponsoring agencies since 1995 have links to full text.

MarciveWeb DOCS
Index of U.S. government publications since July 1976.

AFTE Journal Keyword Index www.afte.org/ExamResources/journalindex.htm
A volunteer effort, this is the only index to the Association of Firearm and Tool Mark Examiners journal and newsletters.

Journal of Forensic Sciences Index http://www.astm.org/Standard/books_journals.shtml
Search by keyword/author or browse tables of contents from 1981 to the present.

Science and Justice Index http://www.forensic-science-society.org.uk/home?v=1
Tables of contents for the last four years and a searchable index for this Forensic Science Society journal.

Selected Periodicals

Click on the Periodical Title to see MU library holdings in all formats. This is not an exhaustive list of journals you may find useful, just a starting point. (Peer-reviewed) designates periodicals that are scholarly and use a pre-publication review process. "Refereed" is another term used to indicate these scholarly reviewed periodicals.

Journal of Forensic Sciences (Peer-reviewed) PER/RA1001.J68
Official journal of the American Academy of Forensic Sciences.

Analytical Chemistry (Peer-reviewed) Chemistry Library (1987--) and Morrow PER/TP1 .I61 (1929-1986)
Articles on theoretical and applied aspects of analysis, modern instrumentation, and other topics of interest to analytic chemists.

Crime and Clues: the Art and Science of Criminal Investigation
Online collection of articles.

Crime Laboratory Digest J 1.14/18: Government Documents
Published by the Federal Bureau of Investigation laboratory in cooperation with the American Society of Crime Laboratory Directors.

FBI Law Enforcement Bulletin HV6201 .F2 Drinko Reading Room and Drinko Media
Published by the Federal Bureau of Investigation, this deals with all aspects of law enforcement.

Forensic Science Communications
Online quarterly publication of the Federal Bureau of Investigation, with online access back to the first volume (1999).

Genome Research (Peer-reviewed) PER/QP606 .D46P358
International journal focusing on genome studies in all species. Also available from the publisher.

Reference Sources

Encyclopedia of Forensic Science: a compendium of detective fact and fiction. Barbara G. Conklin, Robert Gardner, and Dennis Shortelle. HV8073 .C595 2002 Drinko Ref.
Covers the major scientific techniques and devices used by forensic scientists, as well as notable criminals and crimes.

Encyclopedia of Crime and Justice. 2nd Ed. HV6017 .E52 2002 Drinko Ref.
Three volume set written for the layperson rather than the expert. There are more than 250 signed articles with bibliographies.

Encyclopedia of Crime and Punishment HV6017 .E524 2002 Drinko Ref.
Four volume set covering the entire criminal justice system. The focus is on the current situation in the United States, although other countries, issues, and times are included. The signed articles have bibliographies.

The Dictionary of Criminal Justice HV7411 .R87 1991 Drinko Ref.
Short definitions, and summaries of Supreme Court cases affecting criminal justice.

Reference Manual on Scientific Evidence, 2d. Edition.
Handbook for federal judges on how to recognize "the characteristics and reasoning of 'science' as it is relevant in litigation." The first edition, Handbook of Forensic Science, is in the Government Documents collection, call number J 1.14/16:F76/994/POCK.

ATF Arson Investigative Guide. T 70.8:AR 7/2004 Gov. Documents
Manual on investigating fires written by the federal Bureau of Alcohol, Tobacco, Firearms and Explosives.

Death Investigation: a guide for the scene investigation. (1999). https://ncjrs.gov/pdffiles1/nij/234457.pdf and J 28.24/3:D 34/7 Gov.Documents
Results of a study that identified, described, and put together a standard set of 29 investigative tasks to be performed at a death scene.

Electronic Crime Scene Investigation: a guide for first responders. (2001).
https://www.ncjrs.gov/pdffiles1/nij/219941.pdf
Guide to the recognition, collection, and preservation of electronic evidence (such as computer systems, memory cards, and digital cameras) in various crime scenes.

Forensic Examination of Digital Evidence: a guide for law enforcement.
(2004). https://www.ncjrs.gov/pdffiles1/nij/199408.pdf and J 28.15/2:F76 Gov. Documents
Second in a series, this guide is for those actually examining digital evidence. Covered are policy and procedure development; evidence assessment, acquisition, and examination; and documentation and reporting.

Forensic Laboratories: handbook for facility planning, design, construction, and moving. (1998)
http://www.nij.gov/pubs-sum/168106.htm and J 28.24/3: F 76 Gov. Documents
Designed as a resource, not a standard, for those building a new facility, redoing an existing facility, and moving a laboratory. The PDF version on the web does not have the appendices; see the print version for the complete text. A plain text version (without figures, charts, forms, or tables) is also available.

The Future of Forensic DNA Testing: predictions of the Research and Development Working Group.(2000). https://www.ncjrs.gov/pdffiles1/nij/183697.pdf and J 28.23: F 76/2 Gov. Documents
Report that examines the history of DNA testing and tries to predict the technological advances that will affect forensic DNA analysis. A general section with nontechnical language is followed by detailed technical appendices.

Handbook of Forensic Services (FBI Laboratory Division and the Investigative Technology Division). (2003). http://www.fbi.gov/about-us/lab/handbook-of-forensic-services-pdf/ . Official guidance and procedures for the collection, preservation, packaging, and shipping of evidence to the FBI's Laboratory Division and Investigative Technology Division, as well as who can (and cannot) submit evidence.

Managing Death Investigations. Arthur E. Westveer. (Revised 1997). J 1.14/2: D 34/2 Gov. Documents
Standard handbook for all aspects of homicide and murder investigations.

User's Guide to NIST Fingerprint Image Software (NFIS). (2001). C 13.58:6813 Gov. Documents microfiche
Documentation for the public domain software developed for the FBI to support and further the automated manipulation and processing of fingerprint images. The software itself can be downloaded from the National Institute of Standards and Technology.

Internet Resources

The Web provides a tremendous number of resources for research on forensic science. It is essential that you use a good search engine (such as Teoma, HotBot, Alta Vista, Excite, and Google), a directory site (such as the Librarian's Index to the Internet, About.com, Yahoo!, the Scout Report, and INFOMINE,), or one of the forensic science gateways. These are some useful sites to get you started:

Gateways and Collections

Forensic Science Resources on the Internet www.istl.org/03-spring/internet.html
An excellent webliography written for librarians serving a scientific or technical audience, and anyone interested in forensic sciences. Entries have extensive descriptions.

Zeno's Forensic Site forensic.to/forensic.html
A comprehensive and widely recognized site, developed by Zeno Geradts, a forensic scientist at the Netherlands Forensic Institute of the Ministry of Justice.

Reddy's Forensic Page www.forensicpage.com/
Another excellent and often cited site. Reddy Chamakura is a forensic scientist with the Police Laboratory, New York City Police Department.

Forensic-Evidence.com www.forensic-evidence.com/site/MasterIndex.html
Bills itself as "an information center in forensic science, law and public policy for lawyers, forensic scientists, educators, and public officials." Lots of articles and an extensive set of links.

Kruglick's Forensic Resource and Criminal Law Search Site www.kruglaw.com
Over 1,500 links arranged by forensic specialty, put together by a California attorney.

Kulesh's Digital/Cyber/Computational Forensic Page http:/isis.poly.edu/kulesh/forensics/list.htm
Produced by a doctoral student in computer science at the Polytechnic University, Brooklyn, New York, this is a plain site with lots of links.

Forensic Weblinks www.gwu.edu/~forensic/resources/index.cfm
Extensive set of links arranged by forensic subject from the George Washington University Department of Forensic Science.

Yahoo! Science>Forensics directory dir.yahoo.com/Science/Forensic_Science
Extensive set of links to sites related to forensic science and its various specialties. Sites are selected and evaluated by humans, not software.

Forensic Chemistry and Toxicology

Alan Barbour's Forensic Toxicology Page www.abarbour.net
Guide to forensic toxicology links, experts, and laboratories.

Anil Aggrawal's Forensic Toxicology Page members.tripod.com/~Prof_Anil_Aggrawal/index.html
Published by a professor of forensic medicine in New Delhi, India.

Mass Spectrometry Databases www.ualberta.ca/~gjones/mslib.htm
A project of the American Academy of Forensic Sciences' Toxicology Section, there are links to information on mass spectra of drugs and metabolites.

Scientific Working Group for the Analysis of Seized Drugs(SWGDRUG) www.swgdrug.org
An international group with the mission of recommending minimum standards for the forensic examination of seized drugs.

Crime Scene Investigation

Crime Scene Evidence Files www.crimescene.com/
Presents fictional crime cases with weekly updates of evidence. Those who pay can interact directly with the investigators and use an evidence search engine; non-payers view evidence later, but can still post theories and questions to a discussion area.

Crime Scene Investigation.net www.crime-scene-investigator.net/index.html
Sections on crime scene response, evidence collection, photography, articles, and links.

Bloodstain Pattern Analysis Tutorial http://www.bloodspatter.com/bloodstain-tutorial
Tutorial on how to analyze the shape, location, and distribution pattern of bloodstains at crime scenes. There is also a computer program that will help with this task.

Forensic DNA Analysis

Frequently asked questions about DNA profiling www.interpol.com/Public/Forensic/dna/dnafaq.asp
FAQ page from Interpol, the international police organization.

DNA Fingerprinting http://www.dnalc.org/resources/animations/
Two animated tutorials give the science and application of DNA testing (requires Shockwave plug-in), plus links to related material.

How DNA Evidence Works www.howstuffworks.com/dna-evidence.htm
Easily understood introduction to the process and application of forensic DNA analysis.

MITOMAP: a human mitochondrial genome database www.mitomap.org/
Searchable database of "polymorphisms and mutations," along with several other databases, a bibliography, and several reports.

Forensic Mathematics dna-view.com/
The web page for a consultant who applies mathematics to DNA identification, this has lots of information and links.

Forensic Entomology

Forensic Entomology: Insects in Legal Investigations www.forensicentomology.com/index.html
A site created to give a basic knowledge of what insects of forensic importance look like, how to collect them, and what they mean to an investigation.

Fingerprints

Latent-prints.com www.latent-prints.com/
Deals with latent fingerprints, latent print examination, and fingerprint identification.

Scientific Working Group on Friction Ridge Analysis, Study, and Technology www.swgfast.org/
International group working to establish guidelines for the training and development of friction ridge examiners, guidelines for quality assurance and quality control, and research on examination techniques.

Latent Print Examination: Fingerprints, Palmprints, and Footprints www.fpsociety.org.uk/
Sections for experts, police, and general information. Extensive links, especially to legal challenges of fingerprint evidence.

Firearms, Ballistics, and Explosives

NIJ Firearms Examiner Training http://nij.gov/training/firearms-training/

FirearmsID.com www.firearmsid.com/
Non-profit site designed as an educational and an investigative aid. A good introduction to forensic firearm identification.

Firearms Tutorial: Internet Pathology Laboratory for Medical Education http://library.med.utah.edu/WebPath/TUTORIAL/GUNS/GUNINTRO.html
Produced by the Florida State University College of Medicine, this site aims to give doctors a working knowledge of firearms, ammunition, gunshot injuries, and the techniques used by forensic pathologists.

Explosives, Bomb Threat, and Detection Resources http://www.atf.gov/press/releases/2002/06/061402-atf-promotes-fireworks-safety.html
Page of links from the Federal Bureau of Alcohol, Tobacco, Firearms, and Explosives.

Forensic Microscopy and Imaging

Introduction to Optical Microscopy, Digital Imaging, and Photomicrography micro.magnet.fsu.edu/primer/index.html
Outstanding introduction to the optical microscope, physics of light and color, specialized techniques, digital imaging with optical microscopy, and stereomicroscopy. Links to microscope manufacturers.

Institute for Forensic Imaging www.ifi-indy.org/
A non-profit organization with the mission of improving the effectiveness of the investigation of crimes through training, consulting, research, and development activities. Works with the Informatics Research Institute, School of Informatics, Indiana University Purdue University Indianapolis.

Questioned Documents

Questioned Document Examination Page www.qdewill.com/
The basics of the specialty from a certified document examiner.

IdentiFont www.identifont.com
Identify an unknown font by answering a series of questions about it; or search by type, name, or designer.

Professional Organizations

American Academy of Forensic Sciences (AAFS) www.aafs.org/
Nonprofit professional organization that since 1948 has tried to apply science to the process of law. Membership is drawn from all areas of forensic science practice and research.

American Board of Criminalistics www.criminlaistics.com
Certifying board for professional qualification in one or more areas of criminalistics. The Board of Directors has representatives from eight regional and national forensic organizations.

American Board of Forensic Entomology http://www.forensicentomology.com/info.htm
Certification organization for those "using insect evidence to uncover circumstances of interest to the law".

American Board of Forensic Toxicology www.abft.org/
Certifies practitioners and specialists of forensic toxicology, and accredits laboratories that perform postmortem forensic toxicology or human performance toxicology.

Association of Firearm and Tool Mark Examiners www.afte.org/
Professional organization for the advancement and certification of specialists in this area of forensic science.

Forensic Science Society www.forensic-science-society.org.uk/
One of the oldest forensic societies, based in the United Kingdom. Publishes the peer-reviewed journal Science and Justice.

Forensic Toxicologist Certification Board home.usit.net/~robsears/ftcb/index.htm
Offers certification in forensic toxicology, forensic alcohol toxicology, and forensic drug toxicology.

Microscopy Society of America www.microscopy.org
Aims to increase and improve the science and practice of microscopy, imaging, and compositional analysis.

Mid-Atlantic Association of Forensic Scientists maafs.org
Regional organization for those in West Virginia, Pennsylvania, and other Mid-Atlantic states.

Midwestern Association of Forensic Scientists www.mafs.net Regional organization for those in Kentucky, Ohio, and other Mid-West states .

Society of Forensic Toxicologists www.soft-tox.org/
Practicing forensic toxicologists and those interested in promoting and developing the field.

TWGFEX: the Technical Working Group for Fire and Explosions www.ncfs.ucf.edu/twgfex/home.html
Establishes and maintains programs, protocols, and guides for the forensic investigation of fire, arson, and explosion scenes, and devices. Sponsored by the National Center for Forensic Science (NCFS) www.ncfs.ucf.edu

Information provided by:
Timothy A. Balch, Reference Services Librarian | balch@marshall.edu

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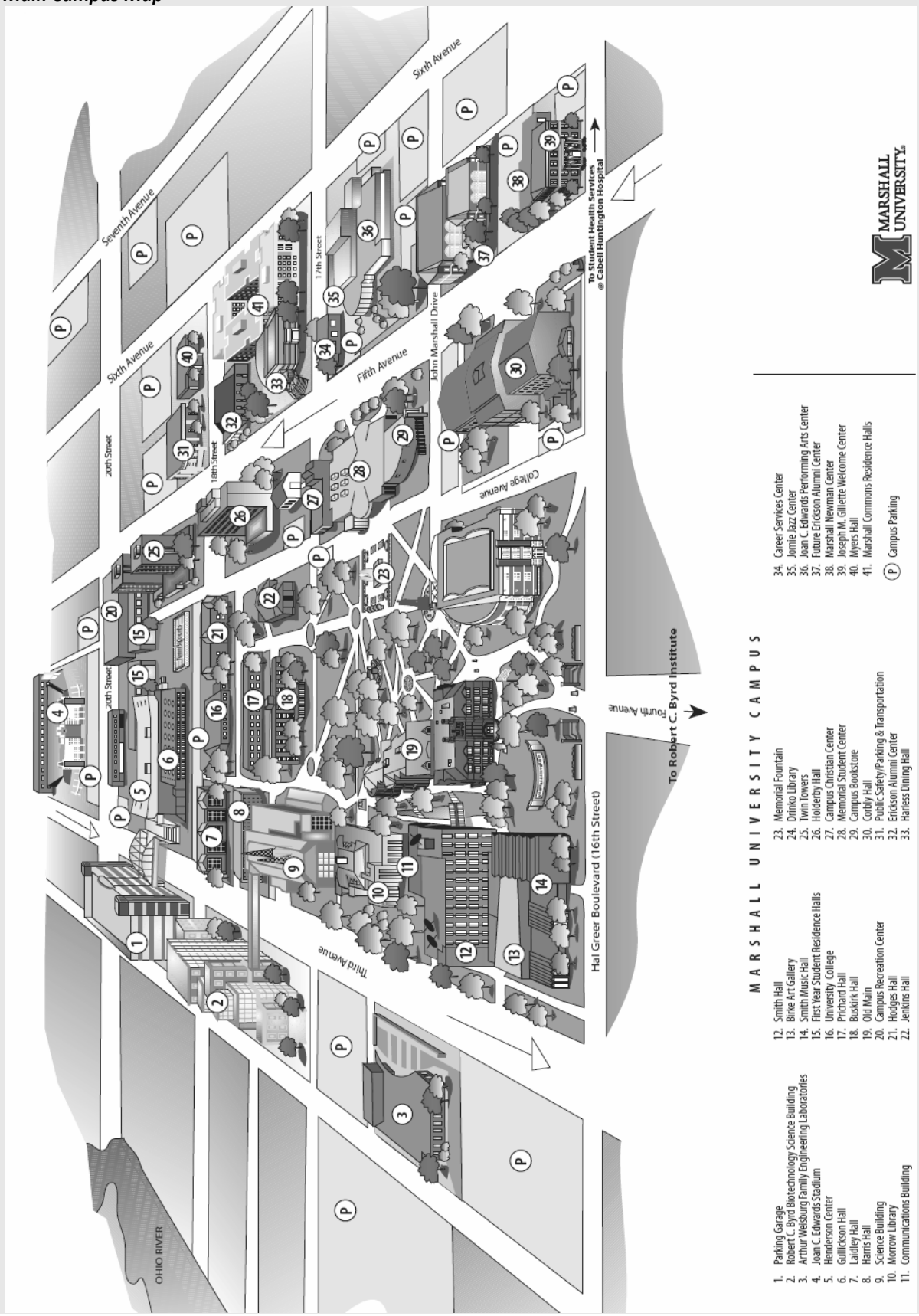
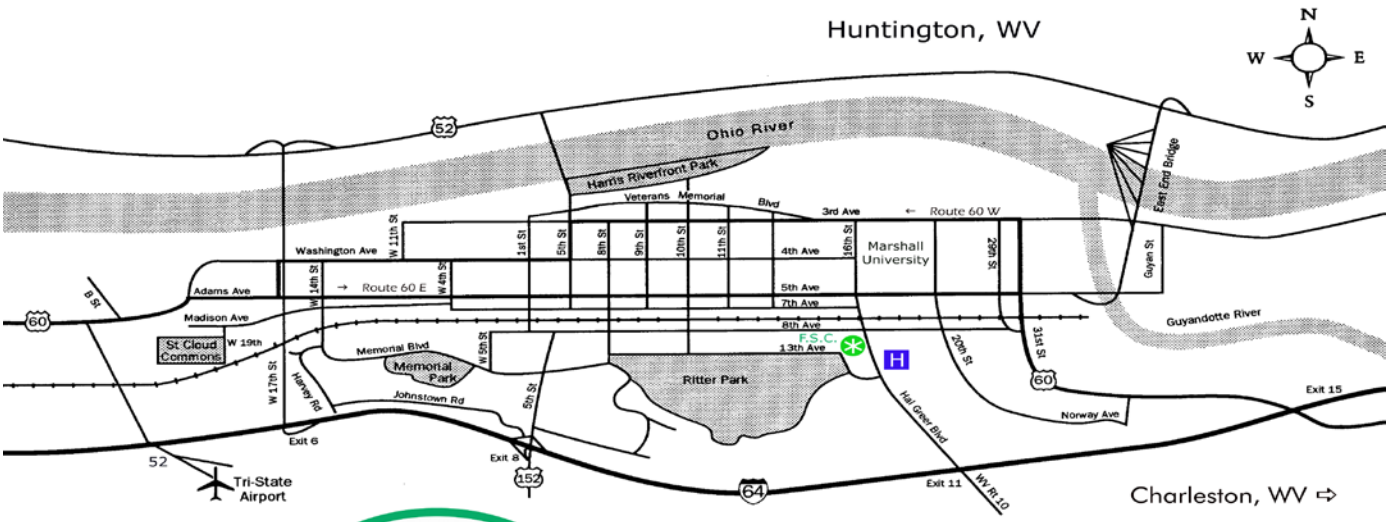
MAPS AND DIRECTIONS

Main Campus Map



Directions: Marshall University Forensic Science Center - Marshall University School of Medicine Campus



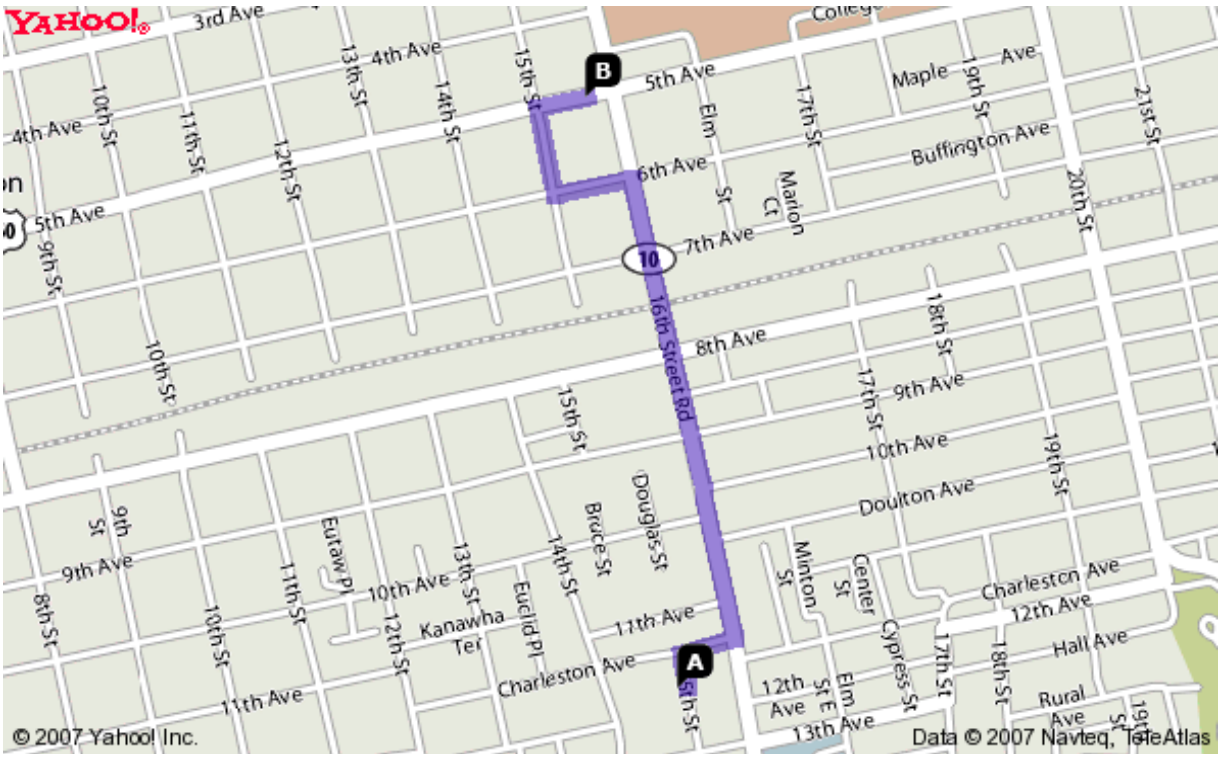
Marshall University Forensic Science Center
Marshall University School of Medicine Campus
1401 Forensic Science Drive
Huntington, WV 25701-3628
Phone: 304-691-8931 | Fax: 304-691-8929

From I-64:

- Take Exit 11 onto Hal Greer Blvd. (Route 10)
- Go North toward Downtown Huntington
- Turn left at Charleston Ave. (Chevron Station on corner)
- Immediately past first street on left (15th Street), turn left into gated parking lot (at old Fairfield Football Stadium)

Address for GPS Systems:
1480 Charleston Ave, Huntington, WV 25701

Directions: Crime Scene House (CSH)

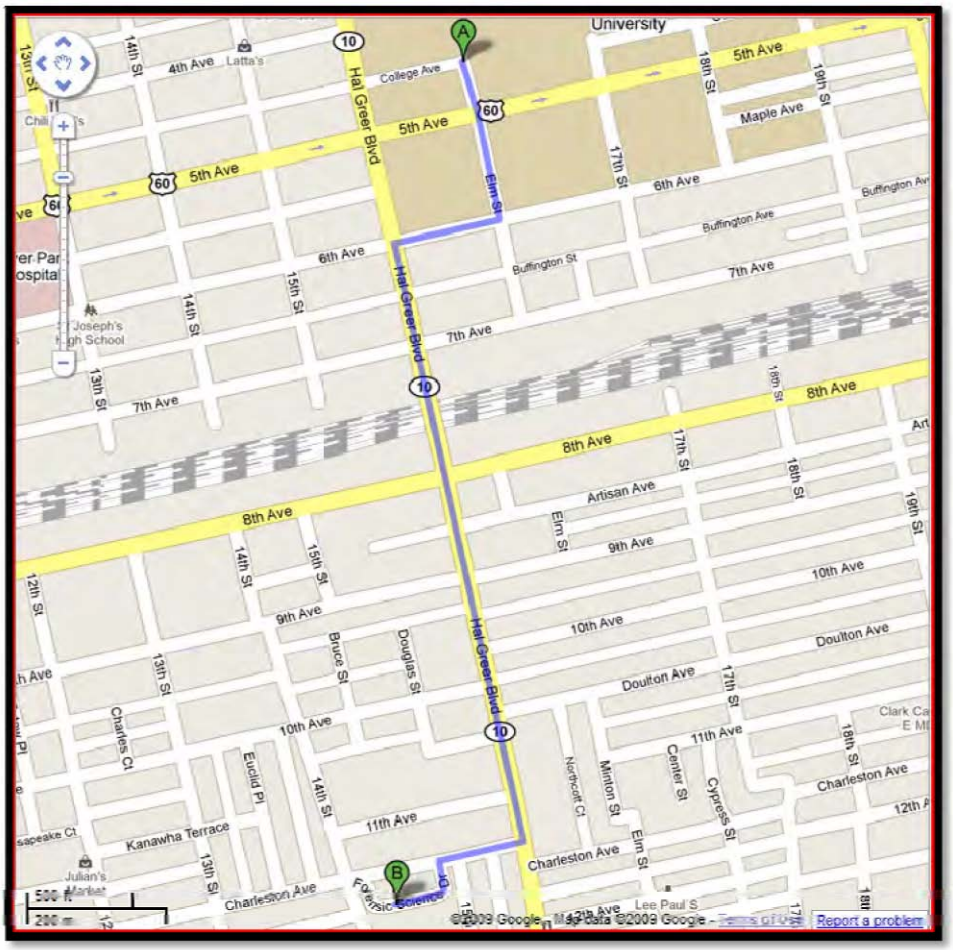


MUFSC Crime Scene House
1524 5th Avenue
Huntington, WV 25703
304-696-0000

From Marshall University Forensic Science Center (To park in the back):

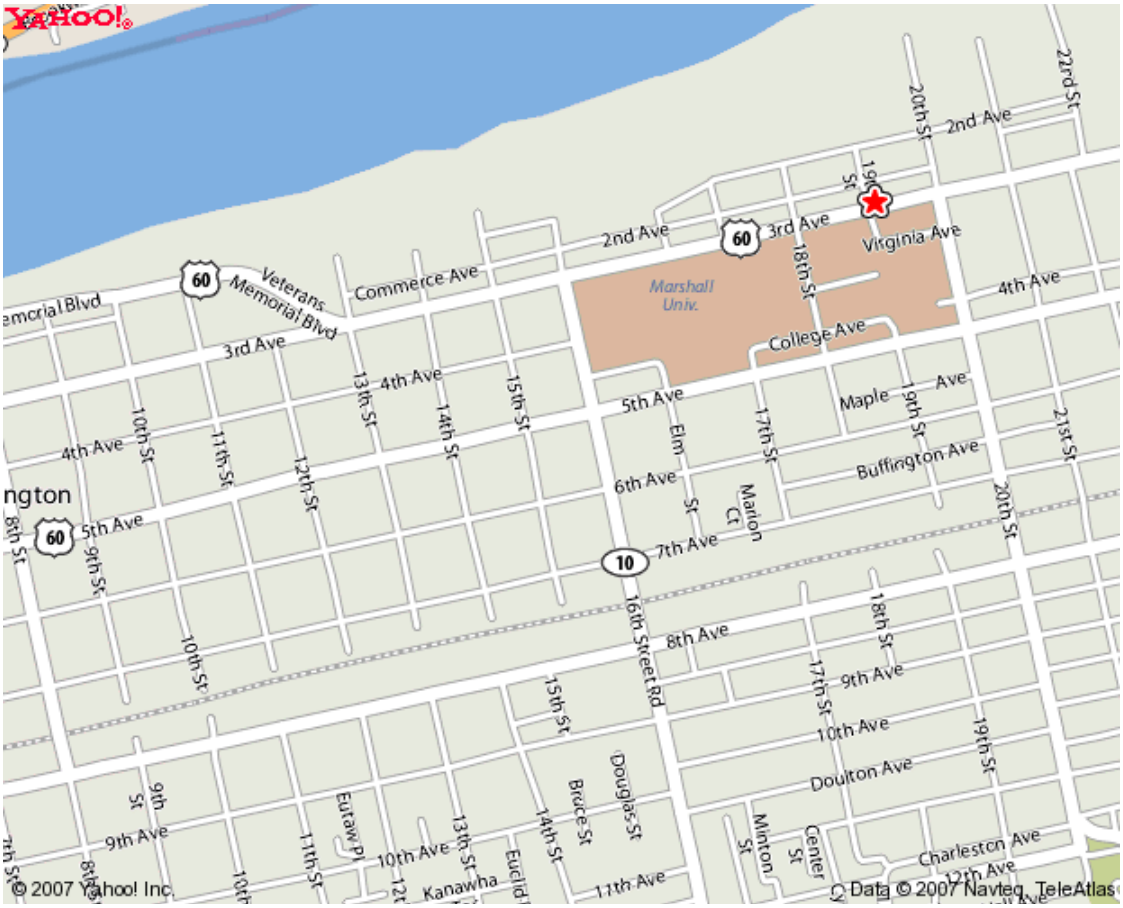
- On Hal Greer Blvd go north, towards main campus
- Turn left at the alley between 5th Avenue and 4th Avenue
- It is the second house on the left
- There is an area to park off to the left of the alley, behind the house

Directions: Marshall University Main Campus - Old Main Building to Forensic Science Campus



1) Head south on John Marshall Drive/Elm Street toward 5th Ave
2) Turn right at the 1st cross street onto 6th Ave
3) Take the 1st left onto Hal Greer Blvd
4) Turn right at Charleston Ave
5) Take the 3rd left onto Forensic Science Dr.

Directions: Byrd Biotechnology Science Center (BBSC)



From Marshall University Forensic Science Center:

- On Hal Greer Blvd (16th Street Rd.) go north to 5th Avenue
- Turn right onto 5th Avenue
- Go west on 5th Avenue to 21st Street
- Turn left on 21st Street
- Go North on 21st Street to 3rd Avenue
- Turn left on 3rd Avenue
- The Byrd Bioscience Technology Center will be on the left.

Student Parking Area:

- Students can park at meters along 3rd or 4th Avenue
- Parking Permits are available for checkout from MUFSC Program Office 2nd floor front desk.
- There is a permit-required lot available for parking at the corner of Hal Greer Blvd and 3rd Ave.

Directions: Fairfield Professional Building (FPB)

Forensic Science Program
Fairfield Professional Building
1616 13th Avenue, Suite 3
Huntington, WV 25701

From Marshall University:

- On Hal Greer Blvd go south to 13th Avenue.
- Turn left onto 13th Avenue. Tudor's Biscuit on corner.
- The teaching facility is on the 3rd floor Suite 3 of the Fairfield Professional Building. (White building with black building)

From I-64:

- Take Exit 11 onto Hal Greer Blvd. (RT 10)
- Go North toward Downtown Huntington
- Turn right on 13th Avenue

Student Parking Area:

- From main campus, go south on Hal Greer Blvd.
- Immediately after passing the Chevron station on the right from the left lane turn left into the alley directly across from Auto Tech.
- Park in the grassy lot behind the professional building.
- Any student who parks in a restricted area will have their car towed at owner's expense

Byrd Clinical Center Information

TO: All Byrd Clinical Center Faculty, Staff and Students

- Fire or medical emergencies must be addressed by utilizing the Cabell County 911 system, (dial 9-9-911 from within the building). Once these emergencies have been reported, other appropriate action may be taken pursuant to our safety and medical response training programs.

- Normal business operating hours for the Clinical Center will be 7 a.m. to 6 p.m., Monday through Friday. The main patient door facing 15th Street will be open during these hours. The student/staff entrance located on the lowest level at the east side of the building will also be open during these hours. A third entrance on the lowest level at the west side of the building has been designated as a staff only entrance and it will remain locked at all times. Access will be available only by swipe card access. Faculty and designated staff will have swipe card access to the building at all times. However, after 10 p.m. all such access will be restricted to the swipe card entrance at the front door.

PARKING

- Parking on the 15th Street deck is restricted to patients only from 7 a.m. to 5 p.m. Faculty, staff, and students are not permitted to park on the parking deck during these hours and will be subject to towing without advance warning. It is critical that we maintain adequate and adjacent parking for our patients. Please inform other routine visitors to the facility of this policy. Pharmaceutical representatives, sales representatives, and other visitors may not park on the patient deck.

- Faculty, staff, and student parking is available on the main field level and on the intermediate levels under the parking deck and on the far west side of the site. Parking will be unrestricted and available on a first come, first serve basis to all occupants of the building. Faculty, staff, and students choosing to park under the patient deck should exercise extra caution when using this area because it is somewhat obstructed from general lines of sight and may pose increased security risks. While we have installed cameras, lighting, and emergency call boxes on this level, everyone should use extra caution when parking there.

OTHER ITEMS

- The entire Fairfield campus including the Clinical Center, Forensic Science Center, and the adjacent parking lots have been designated as a “No Smoking” area. Smoking will not be permitted in the buildings, the surrounding walkways or the parking lots. The non-smoking area begins at the inside edge of the perimeter sidewalk. Faculty, staff, and students caught smoking within this perimeter will be subject to disciplinary action.

- As the Fairfield site is owned by Marshall University, an agency of the State of West Virginia, no firearms, explosive devices, or other hazardous materials are permitted on the site at any time. Alcoholic beverages, non-prescribed controlled substances, and similar materials are also prohibited at all times.

ADVISING SECTION AND FORMS

Application for Forensic Science Excused Absence

Phone (304) 691-8931, Fax (304) 690-4371, forensics@marshall.edu

Please provide the information requested on this form and submit directly to the Academic Program Coordinator with appropriate documentation. Only original documents or verified faxed copies are allowed. Where possible, approvals should be obtained prior to the expected absence.

Name:	**MU ID Number:**
Date(s) of Absence:	

Please list the classes for which you are seeking an Excused Absence.

|-----REQUEST BEING MADE ---------|

Course Name/Number	**Date & Time**	**Instructor's Name & Signature**	**LAB MAKE-UP**	**TAPING**	**EXAM MAKE-UP**	**OTHER**	**NOTIFICATION ONLY**

On the lines provided below, describe the reason for your absence.
Please note: *Routine medical appointments are not excused absences. Excused absences are approved only for the dates confirmed in your documentation and must be submitted at the time of application.*
Confidential requests can be made directly to the Program Coordinator in person.

Reason for Absence:
_____Personal Medical Emergency
_____ Death in Family
_____ Forensic Professional Travel
_____ Other
Explain:_____

_____

I hereby certify that the information provided in support of this request is accurate and I authorize Marshall University Forensic Science Program to verify its contents. Submission of altered or other false documentation is a violation of the Student Code of Rights and Responsibilities and is subject to University Judicial processes.

Signature: _____ Date: _____

Marshall University Forensic Science Program

REQUEST FOR COURSE OVERLOAD

Name: _____Date:_____

901 #:_____

You must complete at least one area of emphasis (AoE). With one AoE, you must complete 3 hrs of elective. If you do two or more AoE, then this elective requirement is waived. Any FSC course can serve as an elective IF it is not being used to fulfill an AoE. For example, if you are completing one AoE (DNA), then FSC 626 Drug (2) AND FSC 628 Chem Trace (2) could serve as electives.

An initial Plan of Study (PoS) is required before completion of the 12th hour in the program. That means you have until the end of Term 1 to get approval for your PoS. So, you have plenty of time. Changes may be made to your initial PoS at any time during Terms 1-4 and well into Term 5.

Nine credit hours are considered full-time for a graduate student. If you are below 9 hrs, your stipend and waiver may be prorated.

Forensic science students are approved for 12 credit hours per term. If you exceed 12 hrs, the Dean and Dr. Staton must approve your request. Begin by sending me an email with the following information:

1. **Request**: I am requesting approval to register for an overload consisting of _____hrs involving the following courses:

   Course #: _____Description:_____Credit Hr.:_____

   Course #: _____Description:_____Credit Hr.:_____

   Course #: _____Description:_____Credit Hr.:_____

   Course #: _____Description:_____Credit Hr.:_____

   Course #: _____Description:_____Credit Hr.:_____

   Course #: _____Description:_____Credit Hr.:_____

   Course #: _____Description:_____Credit Hr.:_____

   Course #: _____Description:_____Credit Hr.:_____

   Course #: _____Description:_____Credit Hr.:_____

2. **Justification**: I am making Successful Academic Progress in the Forensic Science Program with a GPA of _____ for Term _____, an overall GPA of _____, and grade of C in _____ (number) courses including _____. (If no grade of C say “0” & “N/A”.)

Send this to staton1@marshall.edu. Recommendation and follow-up will be arranged when your request has been approved.

CLASS OF 2016
Forensic Science Program Plan of Study
Marshall University Graduate College

TO BE FILLED OUT NO LATER THAN THE COMPLETION OF THE 12th GRADUATE CREDIT HOUR

Name	
MU ID #	**901**
Address (local & home)	
Phone (local & cell)	
Degree/Major/Program	**FORENSIC SCIENCE**
Advisor	**DR. STATON rev 9/5/2014**
Areas of emphasis (mark up to 4)	☐**Digital Forensics** ☐**Crime Scene** ☐**DNA Analysis** ☐**Forensic Chemistry**
Term/year plan to graduate[1]	**May 2016**
GRE[2]	
Thesis?	**NO YES**
Graduate Catalog of Record	**Fall 2014**

List below the graduate courses currently in progress or completed. (If the course is to be transferred, indicate the institution where credit was earned.) Any change in coursework or completion date must be approved in writing by your advisor and Graduate Dean or their successors.

FORENSIC SCIENCE CORE CURRICULUM						
Program / Course No.	**Course Title**	**Term Scheduled**	**Term Complete**	**Instructor**	**Cr Hr**	**Grade**
FSC 606	Crime Scene/Death Investigations	**Fall 14**	Select Term	T. Fenger	2	Grade
FSC 624	Biochemistry: Forensic	**Fall 14**	Select Term	P. Staton	4	Grade
FSC 622	Forensic Analytical Chemistry I	**Fall 14**	Select Term	L. Waugh	3	Grade
FSC 680	Forensic Science Seminar 1	**Fall 14**	Select Term	P. Staton	1	Grade
FSC 632	Foundations and Fundamentals in Digital Forensics	**Fall 14**	Select Term	T. Fenger	3	Grade
FSC 623	Forensic Chemistry Lab	**Spring 15**	Select Term	L. Waugh	1	Grade
FSC 604	Genetics & DNA Technology	**Spring 15**	Select Term	J. Chute & M. Williamson	3	Grade
FSC 618	Forensic Comparative Science	**Spring 15**	Select Term	C. Rushton	2	Grade
FSC 680	Forensic Science Seminar 2	**Spring 15**	Select Term	P. Staton	1	Grade
FSC 630	Internship	**Summer 15**	Select Term	P. Staton	5	Grade
FSC 680	Forensic Science Seminar 3	**Fall 15**	Select Term	P. Staton	1	Grade
FSC 612	Introduction to Microscopy/Trace	**Fall 15**	Select Term	C. Rushton	2	Grade
FSC 665	Forensic Science Legal Issues	**Spring 16**	Select Term	C. Chiles	3	Grade
FSC 619	Forensic Statistics	**Spring 16**	Select Term	K. Beatty	3	Grade
FSC 680	Forensic Science Seminar 4	**Spring 16**	Select Term	P. Staton	1	Grade
Elective[3]		**N/A**				

[1] This date must be within 7 years of the first course counted toward the degree. NOTE: This declaration of intent to graduate at a specific time does not put you on the tentative graduation list. You must apply for graduation at the beginning of the semester/term you plan to graduate, pay the diploma fee, and return the graduation application form to the Graduate College office.
[2] An official score report must be on file in the Office of Admissions and Records.
[3] 3 credit hours in the area of emphasis are required if only one area of emphasis is completed. This elective is waived if a multiple areas of emphasis are completed.

********** **SELECT 1 TO 4 AREAS OF EMPHASIS** **********

1. DNA ANALYSIS EMPHASIS

CORE CURRICULUM IN ADDITION TO THE FOLLOWING COURSES

Program / Course No.	Course Title	Term Scheduled	Term Complete	Instructor	Cr Hr	Grade
FSC 603	Genetics and DNA Technology Lab	**Spring 15**	Select Term	S. Seferyn	1	Grade
FSC 627	Human Genetics	**Spring 15**	Select Term	K. Beatty	2	Grade
FSC 629	Advanced DNA Technologies	**Fall 15**	Select Term	J. Chute/ M. Williamson	2	Grade
BSC 550	Molecular Biology	**Fall 15**	Select Term	P. Georgel	3	Grade

You must earn at least 3.0 in both your major and overall Grade Point Average and meet all other catalog requirements in order to graduate.

Mark one: ☐ WILL COMPLETE ☐ WILL NOT COMPLETE _____

_____

Student Date

WE HAVE APPROVED THIS STUDENT'S PLAN OF STUDY

_____

Dr. Pamela Staton, Advisor Date

_____

Dr. Pamela Staton, Faculty Emphasis Advisor Date

_____

Dr. Terry Fenger, Program Director Date

_____

Dr. David Pittenger, Graduate College Dean Date

****

2. FORENSIC CHEMISTRY EMPHASIS

CORE CURRICULUM IN ADDITION TO THE FOLLOWING COURSES

Program / Course No.	Course Title	Term Scheduled	Term Complete	Instructor	Cr Hr	Grade
FSC 626	Forensic Drug Analysis	**Spring 15**	Select Term	L. Waugh	2	Grade
FSC 628	Chemical Analysis of Trace Evidence	**Fall 15**	Select Term	L. Waugh	2	Grade
FSC 608	Forensic Toxicology	**Fall 15**	Select Term	L. Waugh	3	Grade

You must earn at least 3.0 in both your major and overall Grade Point Average and meet all other catalog requirements in order to graduate.

Mark one: ☐ WILL COMPLETE ☐ WILL NOT COMPLETE _____

_____

Student Date

WE HAVE APPROVED THIS STUDENT'S PLAN OF STUDY

_____

Dr. Pamela Staton, Advisor Date

_____

Dr. Lauren Waugh, Faculty Emphasis Advisor Date

_____

Dr. Terry Fenger, Program Director Date

Dr. David Pittenger, Graduate College Dean Date

****

3. DIGITAL FORENSICS EMPHASIS

CORE CURRICULUM IN ADDITION TO THE FOLLOWING COURSES

Program / Course No.	Course Title	Term Scheduled	Term Complete	Instructor	Cr Hr	Grade
FSC 634	DE Search & Seizure	**Spring 15**	Select Term	T. Fenger	3	Grade
FSC 605	Forensic Digital Imaging	**Spring 16**	Select Term	J. Brunty	3	Grade
FSC 609	Network Forensics	**Fall 15**	Select Term	J. Brunty	3	Grade
FSC 676	Advanced Digital Evidence Recovery	**Spring 15**	Select Term	J. Sammons	2	Grade

You must earn at least 3.0 in both your major and overall Grade Point Average and meet all other catalog requirements in order to graduate.

Mark one: ☐ WILL COMPLETE ☐ WILL NOT COMPLETE

Student Date

HAVE APPROVED THIS STUDENT'S PLAN OF STUDY

Dr. Pamela Staton, Advisor Date

Mr. Joshua Brunty, DF Instructor Date

Dr. Terry Fenger, Program Director Date

Dr. David Pittenger, Graduate College Dean Date

****

4. CRIME SCENE & DEATH INVESTIGATION EMPHASIS

CORE CURRICULUM IN ADDITION TO THE FOLLOWING COURSES

Program / Course No.	Course Title	Term Scheduled	Term Complete	Instructor	Cr Hr	Grade
FSC 607	Bloodstain Pattern Analysis	**Spring 16**	Select Term	S. Seferyn	3	Grade
FSC 617	Adv Crime Scene Photography & Documentation	**Spring 15**	Select Term	A. Hoffman	3	Grade
FSC 615	Adv Crime Scene Investigation	**Fall 15**	Select Term	D. Castle	3	Grade

You must earn at least 3.0 in both your major and overall Grade Point Average and meet all other catalog requirements in order to graduate.

Mark one: ☐ WILL COMPLETE ☐ WILL NOT COMPLETE

Student Date

WE HAVE APPROVED THIS STUDENT'S PLAN OF STUDY

Dr. Pamela Staton, Advisor Date

_____

Ms. Nadine Borovicka, Instructor Date

_____

Dr. Terry Fenger, Program Director Date

_____

Dr. David Pittenger, Graduate College Dean Date

REV: pstaton 8_13_2014

MARSHALL UNIVERSITY FORENSIC SCIENCE PROGRAM REGISTRATION CHECKLIST

NAME DATE

Areas of Emphasis: ☐Crime Scene Investigation ☐Digital Forensics ☐DNA Analysis ☐Forensic Chemistry

Elective (3 credits) Required: ____ YES _____ NO Request for Overload Registration Received: _____ YES _____ NO

Plan of Study: _____ Not On-File ____ On-File _____ Requires Revision Internship: Employment:

Academic Progress: _____ Overall GPA _____ Term GPA _____ Total Hrs "C" _____

FIRST SEMESTER – FALL - CORE

Check	Course #	Course Title		Hrs	Total
_____	FSC 606	Crime Scene/Death Investigations	2		
_____	FSC 622	Forensic Analytical Chemistry		3	
_____	FSC 624	Forensics: Biochemistry	4		
_____	FSC 632	Foundations and Fundamentals in Digital Forensics		3	
_____	FSC 680	Forensic Science Seminar 1		1	13
Area of Emphasis					
N/A					
Elective					
_____	FSC 650	DNA: Technical Assistance Program (2)			
_____	FSC 650	Firearms/Toolmarks FT-TAP (1)			

SECOND SEMESTER – SPRING

Check	Course #	Course Title	Hrs	Total	
_____	FSC 623	Forensic Analytical Chemistry Lab	1		
_____	FSC 618	Forensic Comparative Science		2	
_____	FSC 604	Genetics & DNA Technology		3	
_____	FSC 680	Forensic Science Seminar 2		1	7
Areas of Emphasis – (Spring 1 or Spring 2)					
_____	FSC 634	DF: Search & Seizure (3)			
_____	FSC 676	DF: Advanced Digital/FTK (2)			
_____	FSC 617	CSI: Photography & Documentation (3)			
_____	FSC 603	DNA: DNA Lab (1)			
_____	FSC 627	DNA: Human Genetics (2)			
_____	FSC 626	CHM: Drug (2)			
Elective					
_____	FSC 650	DNA: Tech Assistance Program (2)			
_____	FSC 650	Firearms/Toolmarks FT-TAP (1)			
_____	FSC 610	ELEC: Bioterrorism (3)			
_____	FSC 650	ELEC: Lab Management (2)			

THIRD SEMESTER – SUMMER

Check	Course #	Course Title	Hrs	Total	
_____	FSC 630	Internship		5	5

FOURTH SEMESTER – FALL

Check	Course #	Course Title	Hrs		
_____	FSC 612	Introduction to Microscopy/Trace	2		
_____	FSC 680	Forensic Science Seminar 3		1	3
Areas of Emphasis					
_____	FSC 608	CHM: Toxicology (3)			
_____	FSC 628	CHM: Trace (2)			
_____	FSC 629	DNA: Adv DNA (2)			
_____	BSC 550	DNA: Molecular Biology (3)			
_____	FSC 615	CSI: Adv CSI (3)			
_____	FSC 609	DF: Network Forensics (3)			

FIFTH SEMESTER – SPRING

Check	Course #	Course Title	Hrs	Total	
_____	FSC 665	Forensic Science Legal Issues		3	
_____	FSC 680	Forensic Science Seminar 4		1	
_____	FSC 619	Forensic Science Statistical Issues	3	7	
Areas of Emphasis					
Remaining Area of Emphasis courses not completed previous spring.					
_____	FSC 605	DF: Digital Imaging (3)			
_____	FSC 607	CSI: Blood Spatter (3)			
_____	FSC ____	_____			
_____	FSC ____	_____			
Electives:					
_____	FSC 610	ELEC: Bioterrorism (3)			
_____	FSC 650	ELEC: Lab Management (2)			

Rev/7-30-2014/pjs

MARSHALL UNIVERSITY FORENSIC SCIENCE CENTER
EXTERNAL GROUPS AND AGENCIES

REQUEST TO USE FORENSIC SCIENCE RESOURCES

NOTE: Please provide a minimum of 6 weeks to obtain approval. Once approved, the group, organization, or agency may begin planning their event in cooperation with their MU Faculty Member's oversight.

1. Who is your primary contact* internal to MU Forensic Science Program?
__Fenger __Staton __Rankin

***Full-time Faculty Member Providing Event Oversight and Assistance**

2. Person submitting this request and serving as point of contact for the requesting group:

AGENCY	Point-of-Contact Who is submitting the request?	E-mail Address	Office Phone#	Mobile Phone#

3. Does the MUFSC have a working MOU or other formal outreach agreement with your agency or group for such events? YES NO If YES, please attach or state the source of this information.

4. Date(s), Time, & Facility/Room Requested:

Date of Request	Time	Room(s)	Equipment	Other Needs for this event

5. Describe the Event:

Purpose of the Event	State who you believe will attend	State the expected # of participants	Are participants over 18 yrs of age?	State on-line/website link to the event	State any anticipated costs that will be incurred by the MUFSC	Do you need assistance with marketing your event or with news releases?

- **Please provide a DRAFT announcement**

6. For any participant under 18 years of age, a"Hold Harmless Agreement" must be signed prior to the initiation of the event(s).

Note: Hold Harmless Agreements must be signed by a parent or legal guardian for any participant who is under 18 years of age. This agreement must be received prior to the event and must be verified to match the participant sign-in sheet by the Point of Contact.

7. Attendees List – Please provide the following information by the Conclusion of your event.

Name	Job Title	Agency, Org, Firm	Address	Phone#	E-mail	Forensic, Legal, Law Enforcement Discipline

8. Will additional security be required for this event?

9. Will this event have any "special needs" requirements?

10. May we place this event in the "News" section of our website?
http://www.marshall.edu/forensics

11. Other Comments or Information:

Please return this form to staton1@marshall.edu 6-weeks prior to your event or earlier. Once approved, your event will be placed on the MUFSC Calendar to facilitate your room and facility reservation.

When making requests, complete this form to the best of your ability. Submit it to:

Dr. Pamela Staton
Marshall University
1401 Forensic Science Drive
Huntington, WV 25701
Or
staton1@marshall.edu

At the conclusion of the event, please submit the following:
1. Final Announcement with Meeting Agenda and Speaker List ____
2. Attendees List (SEE item #7 above) _____

<Proposal 7_27_2011ps>

CAREER GUIDES

ALUMNI DIRECTORY

SPECIAL NOTICE TO USERS OF THIS DIRECTORY

This directory is the property of the Marshall University Forensic Science Program and has been assembled based solely upon information received from alumnus. This assembled alumni directory is protected under the copyright laws of the United States and is intended solely for use of alumni of the Forensic Science Graduate Program. Alumni names, and associated information, may NOT be released to any person or organization, nor be used for the purpose of solicitation without first obtaining the express written permission from the Marshall University Forensic Science Program.

Marshall University Forensic Science Program
1401 Forensic Science Drive
Huntington, WV 25701
Telephone: 304-691-8931
Fax: 304-691-8929
Email: forensics@marshall.edu
www.marshall.edu/forensics

Forensic Science Career Guide
Marshall University

FORENSIC SCIENCE

CAREER SERVICES

For Internship and Job Seekers

Intro and Table of Contents

This guide was created in partnership between the Marshall University Forensic Science Program and the Career Services Center.

The purpose is of this guide is to provide you with resources that will prepare you for your career search. It is suggested that you attend a one-on-one career coaching session prior to beginning your job/internship search. If you have additional questions, you can e-mail the Career Services Center at career-services@marshall.edu, or contact your academic advisor.

FORENSIC SCIENCE

What can I do with this degree?

GENERAL AREAS	VARIOUS DISCIPLINES
Biology	
	DNA Profiling
	Paternity Testing
	Forensic Biology
Chemistry	
	Toxicology
	Drug Analysis
	Fire Debris & Explosives Analysis
	Chemical Trace Evidence
Crime Scene	
	Crime Scene
Computer Forensics	
	Computer Forensic Examination
	Mobile Phone Forensic Examination
	Information Security
	Criminal Investigation
Comparative Sciences	
	Questioned Documents
	Fingerprints
	Firearms/Toolmarks
	Microscopy

Employers

FEDERAL	STATE	OTHER
Bureau of Alcohol, Tobacco, Firearms, and Explosives	State Crime Labs/State Police Departments	Insurance Agencies
Federal Bureau of Investigation	Coroner Offices	Private Lab Facilities
Drug Enforcement Administration	Medical Examiner Offices	Crime Scene Units
Armed Forces DNA Identification Laboratory	Law Enforcement Offices	

Secret Service	Bureau of Criminal Identification and Investigation	

Forensic Science Career Fields

Forensic Science Tech Career
Forensic science techs work in crime labs to analyze the evidence collected from crime scenes. They may look at things such as hair, fibers, or weapons. They determine whether the evidence collected is important for the investigation. Forensic science technicians may need to write reports and appear in court to give testimony.

Forensic science techs should have a background in science and good problem solving skills. They should be comfortable working with a small group of people. They often do not need to interact with the general public.

Crime Laboratory Analyst Career
Crime laboratory analysts use their highly specialized scientific skills to examine the evidence that has been collected for a crime. They perform the experiments necessary to link evidence to a suspect and discover what really happened in a crime. They often have more specialized training than forensic science technicians.

Crime laboratory analysts should be detail oriented and have a background in science. Special training with scientific equipment will help those interested to get ahead. The work is occasionally repetitive, so those who wish to be crime laboratory analysts should like routines.

Forensic Pathologist Career
Forensic pathologists are medical doctors who perform autopsies on crime victims to determine the cause of death. They write reports that list the "manner of death" (including homicide, natural causes, accident, and undetermined). They are frequently called upon to testify in court cases.

Those who wish to be forensic pathologists must become medical doctors. They should have a keen eye for detail to allow them to determine the cause of death. It is not always the obvious answer. They also should be comfortable working with dead bodies.

Forensic Toxicologist Career
Forensic toxicologists analyze the bodily fluids of a deceased person to determine the presence of drugs, chemicals, or poisons. This can help to identify the cause of death. Additionally, forensic toxicologists also frequently examine the contents of the stomach in order to make qualitative statements regarding what the deceased person last ate and if there were any abnormalities.

Forensic toxicologists should have a background in chemistry. They should be very detail-oriented as the levels of chemicals found in a body may be quite small.

DNA Analyst Career
DNA analysts help to link potential DNA evidence to crime suspects. DNA can be found in blood, hair, or skin that's been left at the scene of the crime. This evidence is carefully collected and then analyzed. DNA evidence is increasingly important in convicting suspects of their crimes. Conversely, DNA evidence has also helped to exonerate formerly convicted suspects who were innocent.

DNA analysts should have a background in science with specialized training in DNA research. They should be detail-oriented and comfortable working with lab equipment. DNA analysts should like routines as the research work that they perform may be somewhat repetitive.

Digital Forensic Examiner Career

Digital forensic examination involves searching a suspect hard drive or cell phone for evidence of a crime. This work is often done in close association with Law Enforcement. Suspect devices are often forensically cloned, and tests are performed on the cloned devices. A written report is created by the examiner that outlines the step-by-step procedures taken, and gives detailed information about any evidence found on the device. Digital forensic examiners may need to appear in court to give testimony.

Digital forensic examiners should have a background in computers and operating systems, and should be detailed oriented. They should be comfortable working alone or with a small group of people. The work is often repetitive but is very interesting. They often do not need to interact with the general public.

Forensic Science Career Overview

Forensic science uses science to aid in law enforcement, and in this pursuit forensic scientists work to give impartial, unbiased scientific evidence which can be used in courts and criminal investigations. Forensic science is very multidisciplinary, as it uses information acquired from a wide variety of fields and disciplines including chemistry, biology, physics, psychology, geology, information technology, and the social sciences.In recent years, shows like CSI and Law and Order have popularized both the field and the profession, and have served to increase the number of students pursuing forensic science degrees.

Forensic scientists are concerned with collecting evidence, and they use the evidence found at places like crime scenes to help solve crimes. Forensic scientists play a very important role in any investigative team, and they rely upon their extensive training and education to help ensure the accuracy of all the evidence collected. Communication skills are very important, as are analytical and computer skills. Details are something forensic scientists must be very concerned with, due to the fact that everything a forensic scientist does is extremely detail oriented â€“ they must be able to identify and properly process tiny pieces of evidence such as a single piece of hair or one fingerprint. A short sample of a forensic scientist's duties are:

- Collecting evidence at the scene of a crime
- Performing tests on evidence
- Preparing reports documenting findings and giving them to investigators
- Giving testimony as an expert witness in court cases

Forensic science is a broad field that encompasses many different careers and specializations, some of which include:

- DNA forensics
- Forensics engineering
- Forensics dentistry
- Forensic Anthropology
- Digital Forensic Examiner
- Medical Examiner

- Crime Scene Examiner
- Handwriting Expert
- Ballistics Expert

Many forensic scientists work in labs, but some field agents do need to travel to crime scenes or to courtrooms. Long hours are not uncommon in this field, especially if evidence has to be collected and analyzed quickly for an important court case. Processing and analyzing evidence is a very meticulous, detail-oriented and time sensitive matter, so weekend work is not uncommon during particularly busy periods. Additionally, while some forensics scientists work full-time, others may work in different occupations and may be called in for forensic consulting work. Some work in forensics full time while others may work in other occupations and occasionally be called in to consult on forensics work.
*From www.guidetoonlineschools.com

Career and Job Skills Portfolio

What is a job skills, job-search, or career portfolio? It is a job-hunting tool that you develop that gives employers a complete picture of who you are -- your experience, your education, your accomplishments, your skill sets -- and what you have the potential to become -- much more than just a cover letter and resume can provide. You can use your career portfolio in job interviews to showcase a point, to illustrate the depth of your skills and experience, or in the future when you are up for a promotion. It is important to keep track of all your experiences.

- Career Summary and Goals: A description of what you stand for (such as work ethic, organizational interests, management philosophy, etc.) and where you see yourself in two to five years.
- Professional Philosophy/Mission Statement: A short description of the guiding principles that drive you and give you purpose.
- Traditional Resume: A summary of your education, achievements, and work experience, using a chronological or functional format.
- Skills, Abilities and Marketable Qualities: A detailed examination of your skills and experience. This section should include the name of the skill area; the performance or behavior, knowledge, or personal traits that contribute to your success in that skill area; your background and specific experiences that demonstrate your application of the skill.
- List of Accomplishments: A detailed listing that highlights the major accomplishments in your career to date.
- Accomplishments are one of the most important elements of any good job-search
- Samples of Your Work: A sampling of your best work, including reports, papers, studies, brochures, projects, presentations, etc. Besides print samples, you can also include CD-ROMs, videos, and other multimedia formats.
- Research, Publications, Reports: A way to showcase multiple skills, including your written communications abilities. Include any published papers and conference proceedings.

- Testimonials and Letters of Recommendations: A collection of any kudos you have received -– from customers, clients, colleagues, past employers, professors, etc. Some experts even suggest including copies of favorable employer evaluations and reviews.
- Awards and Honors: A collection of any certificates of awards, honors, and scholarships.
- Conference and Workshops: A list of conferences, seminars, and workshops you've participated in and/or attended.
- Transcripts, Degrees, Licenses, and Certifications: A description of relevant courses, degrees, licenses, and certifications.
- Professional Development Activities: A listing of professional associations and conferences attended – and any other professional development activities.
- Military records, awards, and badges: A listing of your military service, if applicable.
- Volunteering/Community Service: A description of any community service activities, volunteer or pro bono work you have completed, especially as it relates to your career.
- References List: A list of three to five professional references (including full names, titles, addresses, and phone/email).

JOB/ INTERNSHIP SEARCH CHECKLIST

- Compile a background check portfolio. The information compiled will help you in creating a resume, filling out applications, as well as providing information for background checks.
- Create a resume and/or curriculum vitae (C.V.)
- Prepare a cover letter - Create a generic cover letter that you can customize for each job you are applying for.
- Have at least one person proofread your resume, CV, and cover letter, and give you suggestions for improvement. Remember, the average amount of time spent reading a resume is 45 seconds.
- Ask professors, employers, advisors, supervisors, coaches, etc., to be references
- Compile reference letters.
- Develop your professional network —Collect business cards and keep contacts.
- Use professors, bosses, friends, guest speakers, workshop presenters, etc.
- Develop job leads - Check the Career Center, newspapers, professors, Internet, friends, etc.
- Attend professional organization meetings and conferences. Create new contacts.
- Work on your interviewing skills - Attend an interview skills workshop at the Career Services Center.
- Purchase an "Interviewing" outfit - See the Dress for Success section.
- Search online job databases and job sites focused on your career field (many sites are listed at the end of this guide).
- Consider relocation options
- Send out Resumes/C.V.s
- Send a thank you letter after interviewing.

RESUME VS. CURRICULUM VITAE

Though the term Curriculum Vitae (CV) and Resume are generally interchangeable, there are some significant differences in the two. Curriculum Vitas involve in-depth and structured information about the professional experience and qualification of a person. Resumes are a very abridged summary of what would be written in depth and detail in the CV. This is why typically a CV would be 2+ pages, and the resume is normally limited to 1 – 2 pages.

CVs are the worldwide standard for job applications. CV content preference varies from country to country, and sometimes from company to company—so if you are applying worldwide, check on the preferred format before compiling your CV.

Resumes are the standard form for job applications in United States. Curriculum Vitas are the standard in the U.S. for jobs in the fields of science, higher education, and governmental job fields.

Curriculum Vitae (CV)

- Systematical and has a specific order
- Length can vary from 2-5 pages (or more if necessary)
- Presented in reverse chronological order (i.e. the latest achievements first)
- List of all your professional experience (Up until the date you submit it)
- Description of experience normally written in detailed paragraph form
- Includes all relevant experience - whether paid or unpaid (Voluntary, internship, shadowing, workshop and training experience)
- Always accompanied by a cover letter, which summarizes your CV and points out your relevant
- Skills / experience with the job listing/description.
- Worldwide and scientific standard for job application.

Resume

- Brief—1-2 pages
- Order and content can vary (chronologically and topically)
- Contains experience strictly relevant to the job applied and nothing else
- Bullet pointed summary of job duties, tasks, and achievements
- Highlights skills and achievements
- Purpose is for fast scanning and processing of key words (normally matched with words from the job description).
- Can be submitted without a cover letter in certain instances.
- U.S. Standard for job application.

Resume Writing tips

1. Be Specific About Your Qualifications
2. Focus on Your Accomplishments. Make sure action verbs reflect past-tense since they have already been achieved.
3. Incorporate Keywords
4. Match Your Resume to Your LinkedIn Profile
5. Put the most important information first
6. Use 11 0r 12 point - TIMES NEW ROMAN or other serif font
7. Margins should be about 1" on all sides. You can reduce the margins if you need extra space, but do not make them smaller than 1/2." If the margins are too small, your resume will look too crowded.
8. Avoid underlining, italics, shading, and fancy graphics. They can interfere with electronic scanning.
9. Bold each category heading (ex. CAREER OBJECTIVE).
10. Check spelling, punctuation, grammar, and word usage.
11. Have someone with solid editing skills look over your resume.
12. Use a laser-quality printer or a high-quality photocopier to print your resume.

Basic Resume Worksheet

NAME

address,
phone
email

CAREER OBJECTIVE
(List type of job you are seeking. Example: To obtain a position as a ..... where I could utilize my education and experience in ....., ..., ..., ...)

SKILLS
(List several of your strengths or skills that are relevant to the position you are applying for.)

- xxxxxxxxxxx
- xxxxxxxxxx
- xxxxxxxxxxxxxxx

EDUCATION
Institution name, Location, State
Degree type, i.e. B.S.
Major ..., minor ..... Graduation date
GPA

INTERNSHIP
(List internships, or other relevant experiences)

WORK EXPERIENCE (List employers, list most recent experience first and work back in reverse chronological order)
Employer name, Employer location, state
Position title Employment dates (from - to)

- job duties
- job duties

Employer name, Employer location, state
Position title Employment dates (from - to)

- job duties
- job duties

HONORS & ACTIVITIES
List your accomplishments, honors, memberships, volunteer work, etc.

REFERENCES

"Provided upon request" or "Attached"

Resume Example

JANE REYNOLDS
233 Mortimer Drive
Huntington, WV 25708
(304) 555-5500 - reynolds399@marshall.edu

OBJECTIVE
To obtain a position with the West Virginia State Police Forensic Laboratory.

SKILLS
- Three years of experience working in medical/science environments.
- Excellent computer skills using Cytoscription, DNA Perspective, Microsoft Word, Excel, Power Point.
- Strong attention to detail; precise and timely in work assignments.

EDUCATION
Marshall University, Huntington, WV
M.S., Forensic Science, Emphasis: DNA Analysis — Graduated - May 2009

Virginia Tech, Blacksburg, VA
B.S., ISAT: Biotechnology, Minor: Criminal Justice — Graduated - December 2006
GPA: 3.92,

INTERNSHIP
Las Vegas Metro Police Department, Las Vegas, NV
Cytology Lab Assistant — Spring 2007
- Prepared blood slides for type analysis and DNA testing
- Created and maintained detailed records of testing processes

WORK EXPERIENCE
West Virginia State Police, Winfield, WV
Summer Crime Lab Assistant — Summer 2008
- Performed DNA sequence analyses
- Prepared DNA reports for potential trial presentations

Marshall University, Huntington, WV
College of Science
Graduate Assistant — August 2007 - May 2008 ·
- Prepared slides for blood-typing tests for cytology lab classes
- Proctored lab tests, assisted students as needed

River Park Hospital, Huntington, WV
Recreation Assistant — July 2005 - August 2007
- Supervised patients during recreation periods
- Escorted patients to psychiatric and observation appointments

HONORS

- American Legion Leadership Award, 2005

CURRICULUM VITAE

Content

The following is some of the information that can be included in your curriculum vitae. The elements that you include will depend on what you are applying for, so be sure to incorporate the most relevant information to support your candidacy in your CV.

* Personal/Contact Information

* Name, address, phone number(s), e-mail

* Academic Background

* Postgraduate work, graduate work/degree(s), major/minors, thesis/dissertation titles, honors, undergraduate degree(s), majors/minors, honors

* Professional Licenses / Certifications

* Academic/Teaching Experience

* Courses taught, courses introduced, innovation in teaching, teaching evaluations

* Technical and Specialized Skills

* Related/Other Experience

* Professional/Academic Honors and Awards

* Professional Development

* Conferences/workshops attended, other activities

* Research/Scholarly Activities

* Journal articles, conference proceedings, books, chapters in books, magazine articles, papers presented/workshops, e-zine articles, work currently under submission, work in progress

* Grants

* Service (Academic, Professional, Community)

* Academic/Research Interests

* Affiliations/Memberships

* Foreign Language Abilities/Skills

* Consulting

* Volunteer Work

* References

Curriculum Vitae Example

JANE REYNOLDS
233 Mortimer Drive
Huntington, WV 25708
(304) 555-5500 - reynolds399@marshall.edu

EDUCATION
Master's of Science in Forensic Science (DNA Analysis Emphasis), 2005
Marshall University, Huntington, WV

Bachelor of Science in Biology, 2003
Virginia Tech, Blacksburg, VA

WORK HISTORY
Forensic Scientist II
New York State Patrol, Buffalo Crime Laboratory, Buffalo NY
July 2007- Present

- Completed the majority of training in body fluid identification and DNA analysis. Conduct routine analysis to include: laboratory examination in which the items to be tested require a single specific examination or a standard battery of examinations or analyses, the results of which lead to a conclusion acceptable to experts in the field. Interpret analytical results and prepare written opinion reports. May testify as an expert witness in courts of law.
- Safety Officer for the DNA Casework Section- perform routine safety duties to ensure compliance with chemical hygiene, safety, and blood-borne pathogen principles by providing current information, monitoring the use of chemicals and other hazardous processes, and conducting and documenting regular safety checks of the section.

Forensic Scientist I
New York State Patrol, Buffalo Crime Laboratory, Buffalo, NY
July 2005- July 2007

- Worked in a training capacity and under close supervision performing beginning level analysis of physical evidence in criminal cases submitted to the forensic laboratory. With on-the-job training, learned entry level analysis of casework in body fluid identification and DNA analysis. Interpreted analytical results and prepared written opinion reports.
- Safety Officer for the DNA Casework Section- perform routine safety duties to ensure compliance with chemical hygiene, safety, and blood-borne pathogen principles by providing current information, monitoring the use of chemicals and other hazardous processes, and conducting and documenting regular safety checks of the section.

Graduate Assistant
Marshall University Forensic Science Center (MUFSC), Huntington, WV
August 2003-May2005

- Performed routine physical, chemical, and biological analysis following clearly defined laboratory procedures. Prepared, sterilized and quality checked reagents used in laboratory testing. Operated and performed routine maintenance on laboratory analytical equipment to include: centrifuges, autoclave, 9700, 7000/7500, 3100/3130 and other laboratory equipment. Prepared, washed and sterilized laboratory glassware, pipettes, tubes and other laboratory supplies. Performed other duties as required.

TRAINING

- Moot Court, National Forensic Science Technology Center, Vancouver, NY June 6-11, 2008
- Statistics and Population Genetics for Forensic DNA Analysis, National Forensic Science Technology Center, Vancouver, NY February 19-22, 2008

- Court Testimony Techniques: Success Instead of Survival, Ron Smith & Associates, Inc. Criminal Justice Training Center, Burien, NY January 28-29, 2008
- President's DNA Initiative (PDI)-DNA Analysis Training, National Forensic Science Technology Center, Key Largo, FL November 2007- Present
- Infectious Disease Regional Training 2007, online refresher, Buffalo, NY, October 2007
- STR Training Program, New York State Patrol, Buffalo, NY November 2007-present
- Body Fluid Identification, Pacific Coast Forensic Science Institute, New York State Patrol, Vancouver, NY September 2007
- Biochemical Analysis Training, New York State Patrol, Buffalo, NY July 2007-Present
- Independent Study: "Filtration Based Differential Extraction," Marshall University Forensic Science Center, Huntington, WV, May 2006 to August 2006
- Advanced DNA Training Course (GeneMapper ID), Marshall University, Huntington, WV, April 2006

PRESENTATIONS GIVEN

"Detection of Latent Fingerprints on Items Recovered from Water," New York State Patrol, Buffalo Crime Laboratory, August 2008

"A Filtration Based Differential Extraction Method Tested on Simulated Sexual Assault Evidence", 59th Annual AAFS Meeting, Young Forensic Scientists Forum Poster Session, February 20, 2007

"Internal Validation of the AmpFester MiniFiler Amplification Kit", Journal Article Review, Marshall University, 2005

WORKSHOPS AND CONFERENCES

Applied Biosystems 2008 Future Trends in Forensic DNA Technology Seminar Series, Buffalo, NY
Applied Biosystems 2007 Future Trends in Forensic DNA Technology Seminar Series, Buffalo, NY
59th Annual AAFS Meeting, San Antonio, TX, 2007

- "Mitochondrial DNA Analysis" The Foundation and the Fundamentals at the Leading Edge", 59th Annual AAFA Meeting, San Antonio, TX
- "Young Forensic Scientist Forum", 59th Annual AAFS Meeting, San Antonio, TX

AWARDS AND ACCOMPLISHMENTS

Academic

- Graduated with Honors, Summa Sum Laude, BS in Biology
- Member in good standing of Alpha Chi National Honor Scholarship Society
- Treasure of The Virginia Tech Biology Club
- Presidential Scholar

Military

- The Navy and Marine Corps Achievement Medal for outstanding performance of duty while serving as a Cryptological Direct Support Element Training Department Data Base Entry Coordinator and Assistant to the Command Language Program Manager
- Letter of Appreciation for outstanding professionalism
- Letter of Appreciation for initiative and dedication for outstanding job performance
- Letter of Appreciation for generous efforts to support the community

Cover Letter

The purpose of a cover letter is to introduce yourself to a prospective employer. It should be enclosed with every C.V/resume you send.

Since your cover letter is usually the first contact you have with a potential employer, it should be well written and neat, with no typing or grammatical errors. The importance of neatness cannot be overemphasized. When employers or personnel directors begin to look through cover letters and C.V.s, they often begin by eliminating those that look messy or contain misspelled words and errors in grammar.

Whenever possible, always address your cover letter to a specific person rather than "Dear Sir or Madam" or "To Whom it May Concern." If you don't know a specific name, telephone the company and request the name and title of the appropriate person to receive your letter.

The cover letter should not exceed one page. It should be a “highlight reel” of your most significant accomplishments, relevant skills, and experience. In your own style, it should tell the employer you are interested in the job and desire an interview. You should use keywords from the job listing that are relevant to your experience. Also, make sure you reference the source where you got the job lead or listing from.

Cover letters are not necessary for interviews when arrangements for an interview have already been made.

Cover Letter Example

Jack Shephard
675 Crest Avenue
Los Angeles, CA USA 90001

September 12, 2009

Mr. Charles Widmore Hiring Manager
Ann Arbor Police Department 7821 Cornerstone Blvd.
Ann Arbor, MI USA 48103 Dear Ms. Widmore:

Dear Mr. Widmore,

Please accept my cover letter and my resume as an application for the Forensic Science Technician, which was posted on the ASCLD website.

My experience includes investigating crimes by collecting and analyzing physical evidence with a specialty in DNA analysis. I have worked with other forensic science technicians during my time with the Leebrook Forensic Lab.

If you're interested in speaking to me about this job and meeting me in person, please call me at 555-555-4815 to set up a time that fits your calendar. I look forward to meeting you and hopefully, joining the department. I appreciate your taking time to go over my resume.

Sincerely,

Jack Shephard

Enclosure: resume

Background Check Information

The following is some of the information that can be included in a full background check. Knowing this information ahead of time can help you to develop a portfolio that will help you not only with the background check information, but with composing resumes, C.V.s, and documents for promotions.

- Current contact information
- Citizenship information
- Addresses you have lived at and the name of someone (non-related) who knew you there
    - All roommates names, possibly their contact information (if known).
- Schools Attended and name of someone (non-related) who knew you there
- Employment
    - Name, address, phone, pay, dates, supervisor, title, duties, reasons for leaving, reprimands
    - Periods of unemployment and reasons
- Marital Status
- Immediate Family
    - Name, date of birth, where they were born, citizenship
    - Parents, siblings, spouse, spouses immediate family
- People who have known you for X number of years
- Foreign Contacts- non-US citizens
- Foreign business and professional activities
    - Countries visited with dates
- Mental and emotional health
    - Therapist or counseling
    - Medications
- Police/Criminal record
- Use of drugs/drug related activity
- Use of alcohol
- Previous background checks / revocation of security clearance
- Financial record/ credit check
- Involvement in non-criminal court actions

Background Check Portfolio

- Why a Portfolio?
- Handy for interviews- you look more professional
- Keeps everything together and organized
- Should be in a nice binder
- Everything in plastic pages (no holes punched)
- Table of Contents with tabs to separate sections
- Originals in front with copies you can give out behind them
- Have everything scanned or saved. Keep on a CD or thumb drive for backup

Creating a Background Check Portfolio:

- Begin collecting this information as soon as possible
    - Often you're on a deadline. The sooner the background check is completed the sooner you can start working
- Background checks require information from at least 7-10 years back. It is best to start from the beginning and keep it updated
- Need detailed information
    - Dates, addresses, phone numbers, full names

Portfolio Components:

- Transcripts (all colleges)
- Diplomas (copies)
- SAT/ACT/GRE test scores
- Immunization Records
- Marriage license or name change paperwork (especially if some of your records are in a different name)
- Detailed Job History
- Training/ conference/ workshop certificates
- Professional Memberships
- CV, Resume
- Evaluations (seminar, internships
- Research, Examples of writing, Posters (especially if they are listed on your CV)

Researching Agencies and Organizations

It is very important to know basic facts about the organizations you are interviewing with; it is essential to getting ahead in an interview. There are many types of agencies or organizations (government, corporation, non-profit, etc.), so make sure you know which one you are dealing with before entering an interview. The first step in researching a company is to visit their website. Another step would be to type the company's name into a search program with an asterisk (*) before and after the name, and see what the news or general public has to say about the organization.

RESEARCHING THE AGENCY OR ORGANIZATION

Learn as much as possible about the laboratory, agency, or facility and the community— its people, its size, its problems, and so forth—before the interview. The more knowledge you have about the lab, the better you will perform in the job interview, and the greater your chance of receiving a job offer. If it becomes evident to the interviewer that you know nothing about the lab, it may cost you a job offer.

Your knowledge of the lab, company, or facility should include but not be limited to the following:

- Accreditation
- History/Background of the Organization
- Laboratory Facilities
- Instrumentations
- Divisions
- Benefits
- Culture
- Advancement opportunities
- Financial status
- Strategic plans/goals
- Leadership
- Diversity
- Community involvement
- Owner/President/CEO

Dress for a Successful Interview

Dos and Don'ts for Women

- Do wear a skirt or pants suit. Preferably navy, gray, brown, or black.
- Do wear a business-like dress, if a suit is not an option.
- Do wear a blouse in white or contrasting color and a tailored jacket or blazer.
- Do wear shoes in a conservative color with a medium heel and closed toe.
- Do have a neat appearance, combed hair and clean hands with groomed nails.
- Don't overdo perfume, makeup, or jewelry.
- Don't wear textured or colored hose. Skirt length should be appropriate for a business office.

Dos and Don'ts for Men

- Do wear a suit, solid or pinstripe; navy, gray, brown, or black are best.
- Do wear a dress shirt in white or light blue with a well-ironed collar.
- Do wear a tie that comes down to your belt buckle.
- Do wear shined shoes that are black or brown with matching socks.
- Do have a neat appearance, clean shaven face, combed hair with trimmed beard, and clean hands with groomed nails.
- Don't wear jewelry or excessive cologne.
- Don't wear turtlenecks or leisure suits.
- Don't wear gaudy ties or big belt buckles.
- Don't wear loafers, boots, or sandals.
- Don't wear shoes with badly worn heels.

How To Behave In an Interview

INTERVIEW! The word itself can strike terror into the hearts of job seekers or at the very least cause sweaty palms and nervous anxiety.
Most job applicants know that the interview is the most important 60 minutes in a job search. By preparing yourself for a job interview, you can have a strong advantage over other job applicants who do not take the time to learn how to present themselves well to a prospective employer.

Five Key Factors in Successful Interviewing

1. Make a positive impression: Arrive early, dress appropriately, eat a mint so your breath is fresh, offer a firm handshake, smile, and make eye contact; know some facts about the organization, and present a neat and effective C.V. or resume.

2. Communicate your skills: Answer questions completely and honestly, emphasize your skills and personal strengths, ask insightful questions about the company or job, and never ask about salary or benefits unless the interviewer brings them up first.

3. Answer problem questions: Anticipate problem questions by rehearsing answers in advance, turn your weaknesses into strengths, and never say anything derogatory about a previous employer.

4. Let the employer know why he/she should hire you: A job interview is not the time to be modest. Offer specific examples of how your skills will be valuable to the employer.

5. Follow up after the interview: Always send a thank you letter. Stay in touch even if you did not get a job offer.

Commonly Asked Interview Questions

General HR Questions:

- Tell me about yourself
- Describe your ideal supervisor.
- Tell us about the project, what did you do to ensure that the project was being completed by the deadline, as well as the outcome.

General Science and Lab Related Questions:

- What is Quality Assurance and what should a lab do in order to make sure Quality Assurance is in place?
- What would you do if you have a co-worker that likes to talk to you while you're performing a task that requires your total concentration?
- What would you do if you think you might have contaminated a sample?

Technical Job-Related Questions:

- Please describe to us how you would examine a piece of evidence for the presence of biological materials, such as semen, blood, saliva, urine, and feces. Please describe the process as if you're speaking to a group of middle school students.
- Please describe the principles behind capillary electrophoresis.
- What is a presumptive test? What is a confirmatory test? Please give an example of each.

Good vs. Bad Questions

Good—Open ended, specific, asks about past experiences, non-hypothetical, focuses on your actions rather than on good intentions.

Examples:

- Please tell me about a time when you had to make a tough decision when there was no company policy or external set of rules to guide you.
- Please describe how you made the decision and explain the outcome.

Bad—Non-specific, hypothetical, focuses on what you WISH you might have done, would have done, or what others might have done.

Examples:

- If you caught your co-worker stealing office supplies, what would you do?
- If you were in a situation where there is conflict between you and a co-worker, what would you do to resolve the issue?
- Describe your most rewarding and worst job experience.

Questions You May Ask Potential Employers

Most forensic laboratories expect you to show an interest in them by asking intelligent questions about the job or the lab. Some questions you might ask include:

- What technology, instruments, and kits are you currently using?
- What are the avenues for growth in this position (promotions, raises, etc.)?
- What are you policies on continuing education, conferences, and seminars?
- Is this a new position? How long has this position existed?
- How many people have held this position in the last two years?
- Who would be my supervisor? To whom would I report? Whom will I supervise?
- With whom will I be working most closely?
- What do you like about working for this company?
- Are there current plans for expansion or cutbacks?
- What is this company's culture? (Ex: Is it rigid and formal or relaxed and flexible?)
- What are the current problems facing the company (or my department)?
- What do you like the most about working for this company? The least?
- What is the philosophy of the company?
- What do you consider to be the company's strengths and weaknesses?
- What are the company's long and short term goals?
- Describe the work environment.
- What attracted you (the interviewer) to this organization?
- Describe the typical responsibilities of the position.
- What are the most challenging aspects of the position?
- Describe the opportunities for training and professional development.
- Will I receive any formal training?
- Are there opportunities for advancement within the organization?
- When can I expect to hear from you?

Phone Interview Tips

Phone interviews are considered to be difficult since you are not able to read your interviewers' facial expressions and body language.

The way you prepare for a phone interview is not that different from the way you would prepare for a face-to-face interview with a few additional prep steps.

Here is what to do:

- Take the phone interview seriously, just as you would a face-to-face interview.
- Get a high-quality phone or at least, make sure that your cell phone is fully charged and that your location has a reliable and clear signal.
- Dress up as if you would for a face-to-face interview. This will set you in a right frame of mind.
- Stand or, or sit up straight at a table. Research has shown that you project yourself better when you're standing up.
- Cheat a little! Have your resume and other reference documents spread out (easily accessible) so, you don't have to sift through them while on the phone.

VIDEO INTERVIEW TIPS

A few days before:

- Do a trial run with a friend on the other end to give you feedback.
- Wear the outfit you'll wear for the interview.
- Is the shirt pattern/color playing oddly on your camera?
- Are you talking too loudly or not loudly enough?
- How is the lighting and the background?
- If you wear makeup -
  Determine how much makeup you may need. Computer cameras tend to create the appearance of being tired.

The day of your interview:

- Start early, as if you would for an onsite interview.
- Log in early to allow enough time to troubleshoot any last minute problems.

Consider this:

- Position yourself correctly - sit a bit farther back so that your face and upper shoulders are framed in the shot.
- Use the highest-speed Internet connection you can.
- Look up into the computer camera, not the monitor screen. Looking into the camera will give the effect that you are speaking eye to eye.
- Wear what you normally would for a face-to-face interview.

Cheat a little…

- Have a copy of your resume, cover letter or any talking point you want to cover posted somewhere that you can see it without breaking eye contact with the camera.
- DON'T pull the reference documents on the screen - you don't want to risk the possibility of accidentally ending the interview with a wrong click.

THANK YOU LETTER

Purpose

Following an interview, promptly (within 24 hours) write the interviewer a letter expressing appreciation and thanks for the interview. The purpose of this letter is to:

- Show appreciation for the employer's interest in you.
- Reiterate your interest in the position and in the organization.
- Review or remind the employer about your qualifications for the position.
- If you thought of something you forgot to mention in the interview, mention it in your follow-up / thank-you letter.
- Demonstrate that you have good manners and know to write a thank-you letter.
- Follow up with any information the employer may have asked you to provide after the interview.

Typed, handwritten or e-mail?

Thank-you letters can be typed, handwritten or e-mailed.

Thank You Letter Example

Jane Oakley
7 Shawnee Road
Short Hills, NJ 07078
201-555-0303

October 7, 2009

Mrs. Mary Walter
Mellish Greenley Corp., Inc.
1010 Madison Avenue New York, NY

Dear Mrs. Walter:

Thank you very much for taking time out of your busy schedule to interview me for the DNA Lab Analyst position. After our interview, I'm convinced that I have what you're looking for in your DNA analysts. After meeting you and the members of your team, I was impressed with the depth of knowledge and experience there. I believe that I would be an asset to your lab.

As we discussed during my interview, my internship last year had responsibilities very similar to those required for this position. I believe that this position is an excellent match for my talents, and experience.

Thank you again for taking the time to speak with me about this position. Please let me know if there is any additional information I can provide for you. I look forward to hearing from you very soon.

Sincerely,

Jane Oakley

Potential Internship Locations

Sponsor	City	State
ATF Field Office	Charleston	WV
ATF Forensic Science Laboratory	Beltsville	MD
ATF Forensics Lab	Walnut Creek	CA
ATF Western Lab	San Francisco	CA
Alabama Department of Forensic Sciences	Florence	AL
Alaska State Crime Lab	Anchorage	AK
Allegheny County Coroner's Office	Pittsburgh	PA
Armed Forces DNA Identification Laboratory	Rockville	MD
Bureau of Criminal Identification & Investigations	London	OH
Commonwealth of Virginia Dept of Criminal Justice Service		VA
Erie County Department of Central Police Services Laboratory	Buffalo	NY
Erie County Medical Examiner	Buffalo	NY
Florida Department of Law Enforcement	Fort Myers	FL
Forensic Science Service	Cambridgeshire	UK
Huntington Fire Department	Huntington	WV
Illinois State Police Forensic Science Center	Chicago	IL
Kentucky State Police Eastern Regional Laboratory	Ashland	KY
Las Vegas Metro Police Department	Las Vegas	NV
Lifecodes Corporation	Stamford	CT
Los Angeles County Sheriff's Department	Los Angeles	CA
Marshall University CODIS Laboratory	Huntington	WV
Marshall University MISDE Laboratory	Huntington	WV
Massachusetts State Police	Boston	MA
Missouri State Highway Patrol Crime Laboratory, Trace Evidence Section	Jefferson City	MO
New Orleans Police Department Crime Lab	New Orleans	LA
N.C. State Bureau of Investigation Crime Lab, Molecular Genetics Section	Raleigh	NC
Phoenix Police Department Crime Lab	Phoenix	AZ
Texas Medical Examiner's Office		TX
Virginia Division of Forensic Science	Richmond	VA
West Virginia Fire Marshal's Office, Arson/Explosives Division	Charleston	WV
West Virginia State Police Forensic Science Laboratory, Latent Print Section	Charleston	WV
West Virginia State Police, DNA Laboratory	Charleston	WV
West Virginia State Police, Trace Evidence/Toxicology/Firearms Section	Charleston	WV
West Virginia State Police, Digital Forensic Unit	Huntington	WV

Job Search Websites and Resources

Association Websites:

- American Academy of Forensic Science (AAFS): www.aafs.org
- AAFS Young Forensic Scientists: www.aafs.org/yfsf
- American Society of Crime Laboratory Directors: www.ascld.org / www.ascld-labs.org
- American Society of Questioned Document Examiners: www.asqde.org
- California Association of Criminalists: www.cacnews.org/jobs/jobs.shtml
- International Association of Identification (IAI): www.theiai.org
- Mid-Atlantic Association of Forensic Scientists: www.maafs.org
- Midwestern Association of Forensic Scientists: www.mafs.net
- National Association of Medical Examiners: thename.org
- Northeastern Association of Forensic Scientists: www.neafs.org
- Northwest Association of Forensic Scientists: www.nwafs.org
- Society of Forensic Toxicologists: www.soft-tox.org
- Southwestern Association of Forensic Scientists: www.swafs.us

Government/Civil Sites:

- Army Criminal Investigation Command: www.cid.army.mil
- Bureau of Alcohol, Tobacco, and Firearms (ATF): www.atf.gov/careers
- California Dept. of Justice: www.ag.ca.gov/careers/exams.htm
- CIA: www.cia.gov/careers
- Federal Job Search: www.federaljobsearch.com
- FBI: www.fbijobs.gov
- National Institute of Justice: www.ojp.usdoj.gov/nij
- NCIS: www.ncis.navy.mil
- UNjobs: unjobs.org
- USA Jobs www.usajobs.gov
- U.S. Drug Enforcement Administration (DEA): www.usdoj.gov/dea/resources/job_applicants.html
- Virginia Dept. of Forensic Science: www.dfs.virginia.gov/jobs/index.cfm

Lab Sites:

- ASCLD (www.ascld.org): Lists all accredited crime labs
- Program on Network Governance- List of Forensic Labs in US: www.hks.harvard.edu/netgov/html/research_dna_cj_labs.htm

Science Job Search Sites:

- Crime Science Investigator.net: www.crime-scene-investigator.net/employment.html
- New Scientist Job Search: www.newscientistjobs.com/jobs
- Forensic Magazine Job Search: jobs.forensicmag.com

- Forensic Hub (Discussion Board): www.forensicHUB.com
- MedZilla: www.medzilla.com
- Police Employment: www.policeemployment.com
- Science Careers, From the Journal of Science: sciencecareers.sciencemag.org

Internship Programs:

- FBI Honors Internship Program: www.fbijobs.gov/231.asp
- NCIS Honors Internship Program: pia.gmu.edu/internships/ documents/NCIS.pdf
- Forensic Science Internships: people.rit.edu/gtfsbi/forensics/internships.htm

General Job Search Sites:

- Monster.com: Largest Job Search Engine
- Indeed.com: A Meta Search Job Engine
- USA.gov: Government Jobs
- CareerBuilder.com: Job Search Engine with great job advice and job resources
- Dice.com: A technology only job search engine
- LinkUp.com: Searches within company websites
- Yahoo! HotJobs: hotjobs.yahoo.com
- SimplyHired.com: Meta Search Engine for Jobs
- LinkedIn.com: Job search/ social network

Forensic Science Certification Opportunities

- Forensic Document Examiner http://www.abfde.org/Certification.html
- Forensic Toxicology Specialist http://www.abft.org/Specialist.asp
- CSI & Other Certifications http://www.theiai.org/certifications/
- Forensic Science (Student) Assessment Test
  http://www.criminalistics.com/pdf/announcements/FSAT2009.pdf
- Various Certifications through the American Board of Criminalistics
  http://www.criminalistics.com/cert_ovw.cfm

  Diplomate (D-ABC) Certification as a Diplomate of the ABC, denoted by the designation D-ABC, is awarded to individuals with a BS/BA in a natural science, two years of forensic laboratory or teaching experience and upon successful completion of any ABC Examination. The examinations are: Comprehensive Criminalistics Examination (CCE), Drug Analysis (DA), Molecular Biology (MB), Fire Debris Analysis (FD), Trace Evidence- Hairs and Fibers (THF) and Trace Evidence – Paints and Polymers (TPP). The CCE is a comprehensive examination covering all disciplines found in a crime laboratory as well as the areas of safety and ethics. Diplomate status is designed for laboratory directors, supervisors, educators, or where Specialty Examinations have not been planned or developed, (e.g. explosives, soils, etc.) or those no longer able to maintain the proficiency testing requirement for their Fellow status.

  Fellow (F-ABC) - Certification as a Fellow of the ABC, denoted by the designation F-ABC, is awarded to successful completion of any of the ABC examinations, successful performance on a proficiency test, and a minimum of two years' experience in the specialty area. The specialty areas currently covered are Molecular Biology, Drug Analysis, Fire Debris Analysis and Trace Evidence – Hairs and Fibers and Trace Evidence – Paint and Polymers. An ABC Fellow certificate signifies that the analyst is qualified to conduct examinations in the specialty area.

  Affiliate Status - An individual who meets all requirements for certification except for the two year forensic laboratory or teaching experience may sit for any examination and upon successful completion of the examination they become "Certification Eligible" until they complete their two years' experience in the specialty tested.

Marshall University Career Services Center

Finding a good forensic science job after graduation requires a lot of hard work, and sometimes, even a little bit of good luck. Fortunately, Marshall University students and graduates can turn to their Career Services for help in conducting an effective job search.

Our skilled career counselors and coaches can help guide you through the confusing maze of C.V.s, resumes, cover letters, interviews, salary negotiations, and other career-related issues. Take advantage of the competitive edge you will gain by registering with your Career Services Center!

We offer a wide variety of career planning and professional development services to help you attain your career goals. Visit our office soon or call (304) 696-2370 to schedule an appointment with one of our career counselors.

Services Available to Students/Alumni:

- Career Fairs
- On-campus Interview Opportunities
- Marshall JobTrax
- InterviewStream
- Career Counseling
- Career Testing
- Job Placement Consulting
- Resume /C.V. Preparation
- Mock Interviews
- Business Resume Cards

- **Phone:** 304.696.2370
- **Fax:** 304.696.2251
- **Email:** career-services@marshall.edu
- **Website:** http://www.marshall.edu/career-services
- **Hours:** Monday – Friday 8 a.m. – 5 p.m.
- **Location:** 1681 5th Avenue Huntington, WV 25755

JobTrax Access

1. Log in to myMU
2. In the upper left corner, click on JobTrax icon – MARSHALL JOBTRAX

If you experience login problems, please call or e-mail:

- **Phone:** 304.696.2370
- **Email:** career-services@marshall.edu

What Can I Do With a Degree in ForSci?

FORENSIC SCIENCE

What can I do with this degree?

General Areas	Various Disciplines
Biology	DNA Profiling Paternity Testing Forensic Biology
Chemistry	Toxicology Drug Analysis Fire Debris & Explosives Analysis Chemical Trace Evidence
Crime Scene	Crime Scene Investigation
Computer Forensics	Computer Forensic Examination Information Security Criminal Investigation
Comparative Sciences	Questioned Documents Fingerprints Firearms/Toolmarks Microscopy

Employers

FEDERAL	STATE	OTHER
Bureau of Alcohol, Tobacco, Firearms, and Explosives	State Crime Labs/State Police Departments	Insurance Agencies
Federal Bureau of Investigation	Coroner Offices	Private Lab Facilities
Drug Enforcement Administration	Medical Examiner Offices	Crime Scene Units
Armed Forces DNA Identification Laboratory	Law Enforcement Offices	
Secret Service	Bureau of Criminal Identification and Investigation	

Forensic Science Career Fields

Forensic Science Tech Career

Forensic science techs work in crime labs to analyze the evidence collected from crime scenes. They may look at things such as hair, fibers, or weapons. They determine whether the evidence collected is important for the investigation. Forensic science technicians may need to write reports and appear in court to give testimony.

Forensic science techs should have a background in science and good problem solving skills. They should be comfortable working with a small group of people. They often do not need to interact with the general public.

Crime Laboratory Analyst Career

Crime laboratory analysts use their highly specialized scientific skills to examine the evidence that has been collected for a crime. They perform the experiments necessary to link evidence to a suspect and discover what really happened in a crime. They often have more specialized training than forensic science technicians.

Crime laboratory analysts should be detail oriented and have a background in science. Special training with scientific equipment will help those interested to get ahead. The work is occasionally repetitive, so those who wish to be crime laboratory analysts should like routines.

Forensic Pathologist Career

Forensic pathologists are medical doctors who perform autopsies on crime victims to determine the cause of death. They write reports that list the “manner of death” (including homicide, natural causes, accident, and undetermined). They are frequently called upon to testify in court cases.

Those who wish to be forensic pathologists must become medical doctors. They should have a keen eye for detail to allow them to determine the cause of death. It is not always the obvious answer. They also should be comfortable working with dead bodies.

Forensic Toxicologist Career

Forensic toxicologists analyze the bodily fluids of a deceased person to determine the presence of drugs, chemicals, or poisons. This can help to identify the cause of death. Additionally, forensic toxicologists also frequently examine the contents of the stomach in order to make qualitative statements regarding what the deceased person last ate and if there were any abnormalities.

Forensic toxicologists should have a background in chemistry. They should be very detail-oriented as the levels of chemicals found in a body may be quite small.

DNA Analyst Career

DNA analysts help to link potential DNA evidence to crime suspects. DNA can be found in blood, hair, or skin that’s been left at the scene of the crime. This evidence is carefully collected and then analyzed. DNA evidence is increasingly important in convicting suspects of their crimes. Conversely, DNA evidence has also helped to exonerate formerly convicted suspects who were innocent.

DNA analysts should have a background in science with specialized training in DNA research. They should be detail-oriented and comfortable working with lab equipment. DNA analysts should like routines as the research work that they perform may be somewhat repetitive.

Forensic Science Career Overview

Forensic science uses science to aid in law enforcement, and in this pursuit forensic scientists work to give impartial, unbiased scientific evidence which can be used in courts and criminal investigations. Forensic science is very multidisciplinary, as it uses information acquired from a wide variety of fields and disciplines including chemistry, biology, physics, psychology, geology and the social sciences. In recent years, shows like CSI and Law and Order have popularized both the field and the profession, and have served to increase the number of students pursuing forensic science degrees.

Forensic scientists are concerned with collecting evidence, and they use the evidence found at places like crime scenes to help solve crimes. Forensic scientists play a very important role in any investigative team, and they rely upon their extensive training and education to help ensure the accuracy of all the evidence collected. Communication skills are very important, as are analytical and computer skills. Details are something forensic scientists must be very concerned with, due to the fact that everything a forensic scientist does is extremely detail oriented â€“ they must be able to identify and properly process tiny pieces of evidence such as a single piece of hair or one fingerprint. A short sample of a forensic scientist's duties are:

- ☑ Collecting evidence at the scene of a crime
- ☑ Performing tests on evidence
- ☑ Preparing reports documenting findings and giving them to investigators
- ☑ Giving testimony as an expert witness in court cases

Forensic science is a broad field that encompasses many different careers and specializations, some of which include:

- ☑ DNA forensics
- ☑ Forensics engineering
- ☑ Forensics dentistry
- ☑ Forensic Anthropology
- ☑ Medical Examiner
- ☑ Crime Scene Examiner
- ☑ Handwriting Expert
- ☑ Ballistics Expert

Many forensic scientists work in labs, but some field agents do need to travel to crime scenes or to courtrooms. Long hours are not uncommon in this field, especially if evidence has to be collected and analyzed quickly for an important court case. Processing and analyzing evidence is a very meticulous, detail-oriented and time sensitive matter, so weekend work is not uncommon during particularly busy periods. Additionally, while some forensics scientists work full-time, others may work in different occupations and may be called in for forensic consulting work. Some work in forensics full time while others may work in other occupations and occasionally be called in to consult on forensics work.

**From www.guidetoonlineschools.com*

Job Search Websites and Resources

Association Websites:

- American Academy of Forensic Science (AAFS): www.aafs.org
- AAFS Young Forensic Scientists: www.aafs.org/yfsf
- American Society of Crime Laboratory Directors: www.ascld.org / www.ascld-labs.org
- American Society of Questioned Document Examiners: www.asqde.org
- California Association of Criminalists: www.cacnews.org/jobs/jobs.shtml
- International Association of Identification (IAI): www.theiai.org
- Mid-Atlantic Association of Forensic Scientists: www.maafs.org
- Midwestern Association of Forensic Scientists: www.mafs.net
- National Association of Medical Examiners: thename.org
- Northeastern Association of Forensic Scientists: www.neafs.org
- Northwest Association of Forensic Scientists: www.nwafs.org
- Society of Forensic Toxicologists: www.soft-tox.org
- Southwestern Association of Forensic Scientists: www.swafs.us

Government/Civil Sites:

- Army Criminal Investigation Command: www.cid.army.mil
- Bureau of Alcohol, Tobacco, and Firearms (ATF): www.atf.gov/careers
- California Dept. of Justice: www.ag.ca.gov/careers/exams.htm
- CIA: www.cia.gov/careers
- Federal Job Search: www.federaljobsearch.com
- FBI: www.fbijobs.gov
- National Institute of Justice: www.ojp.usdoj.gov/nij
- NCIS: www.ncis.navy.mil
- UNjobs: unjobs.org
- USA Jobs www.usajobs.gov
- U.S. Drug Enforcement Administration (DEA): www.usdoj.gov/dea/resources/job_applicants.html
- Virginia Dept. of Forensic Science: www.dfs.virginia.gov/jobs/index.cfm

Lab Sites:

- ASCLD (www.ascld.org): Lists all accredited crime labs
- Program on Network Governance- List of Forensic Labs in US: www.hks.harvard.edu/netgov/html/research_dna_cj_labs.htm

Job Search Websites and Resources—Continued

Science Job Search Sites:

- Crime Science Investigator.net: www.crime-scene-investigator.net/employment.html
- New Scientist Job Search: www.newscientistjobs.com/jobs
- Forensic Magazine Job Search: jobs.forensicmag.com
- Forensic Hub (Discussion Board): www.forensicHUB.com
- MedZilla: www.medzilla.com
- Police Employment: www.policeemployment.com
- Science Careers, From the Journal of Science: sciencecareers.sciencemag.org

Internship Programs:

- FBI Honors Internship Program: www.fbijobs.gov/231.asp
- NCIS Honors Internship Program: pia.gmu.edu/internships/ documents/NCIS.pdf
- Forensic Science Internships: people.rit.edu/gtfsbi/forensics/internships.htm

General Job Search Sites:

- Monster.com: Largest Job Search Engine
- Indeed.com: A Meta Search Job Engine
- USA.gov: Government Jobs
- CareerBuilder.com: Job Search Engine with great job advice and job resources
- Dice.com: A technology only job search engine
- LinkUp.com: Searches within company websites
- Yahoo! HotJobs: hotjobs.yahoo.com
- SimplyHired.com: Meta Search Engine for Jobs
- LinkedIn.com: Job search/ social network
- Craigslist.com

Forensic Science Certification Opportunities

Forensic Document Examiner http://www.abfde.org/Certification.html

Forensic Toxicology Specialist http://www.abft.org/Specialist.asp

Basic Student Knowledge CSI & Other Certifications http://www.theiai.org/certifications/

Forensic Science (Student) Assessment Test
http://www.criminalistics.com/pdf/announcements/FSAT2009.pdf

Various Certifications through the American Board of Criminalistics
http://www.criminalistics.com/cert_ovw.cfm

- ☑ **Diplomate (D-ABC) Certification** as a Diplomate of the ABC, denoted by the designation D-ABC, is awarded to individuals with a BS/BA in a natural science, two years of forensic laboratory or teaching experience and upon successful completion of any ABC Examination. The examinations are: Comprehensive Criminalistics Examination (CCE), Drug Analysis (DA), Molecular Biology (MB), Fire Debris Analysis (FD), Trace Evidence- Hairs and Fibers (THF) and Trace Evidence – Paints and Polymers (TPP). The CCE is a comprehensive examination covering all disciplines found in a crime laboratory as well as the areas of safety and ethics. Diplomate status is designed for laboratory directors, supervisors, educators, or where Specialty Examinations have not been planned or developed, (e.g. explosives, soils, etc.) or those no longer able to maintain the proficiency testing requirement for their Fellow status.

- ☑ **Fellow (F-ABC)** - Certification as a Fellow of the ABC, denoted by the designation F-ABC, is awarded to successful completion of any of the ABC examinations, successful performance on a proficiency test, and a minimum of two years experience in the specialty area. The specialty areas currently covered are Molecular Biology, Drug Analysis, Fire Debris Analysis and Trace Evidence – Hairs and Fibers and Trace Evidence – Paint and Polymers. An ABC Fellow certificate signifies that the analyst is qualified to conduct examinations in the specialty area.

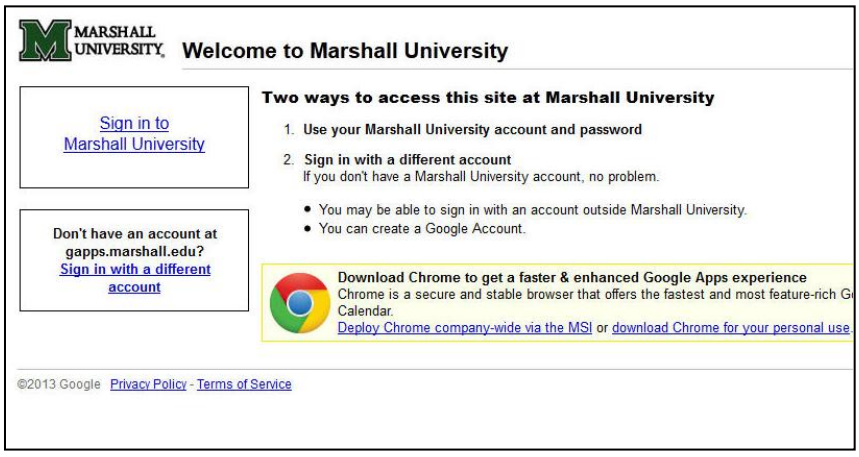
- ☑ **Affiliate Status** - An individual who meets all requirements for certification except for the two year forensic laboratory or teaching experience may sit for any examination and upon successful completion of the examination they become "Certification Eligible" until they complete their two years experience in the specialty tested.

www.marshall.edu/career-services

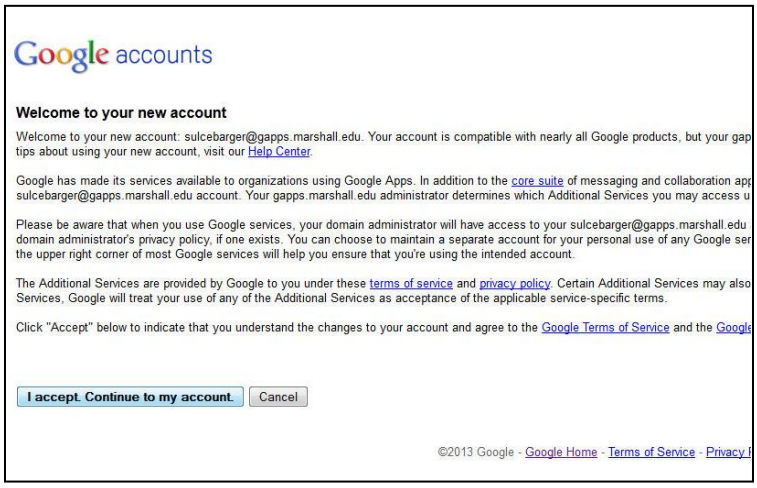
forensics.marshall.edu

Building a Google Apps E-Portfolio

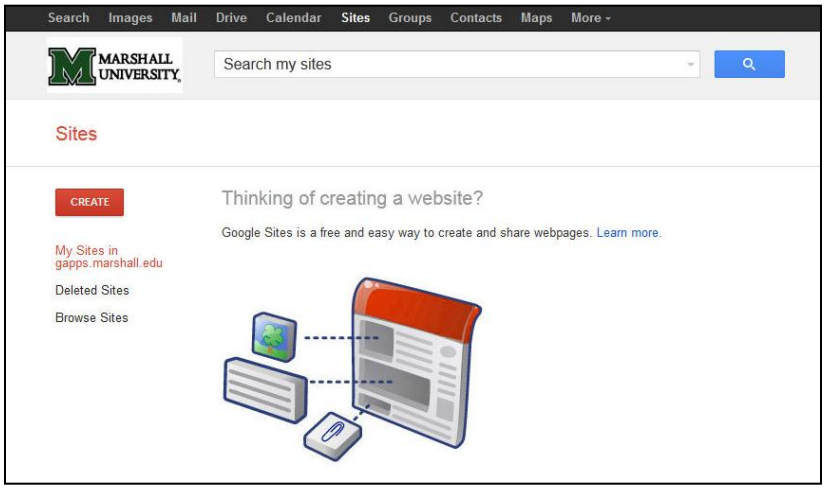
1) Go to http://sites.gapps.marshall.edu. Click "Sign in to Marshall University"
   Tip: If you are unable to reach the home page or sign in through Marshall, you may be logged in under an existing Google account. Try logging out, then retrying.



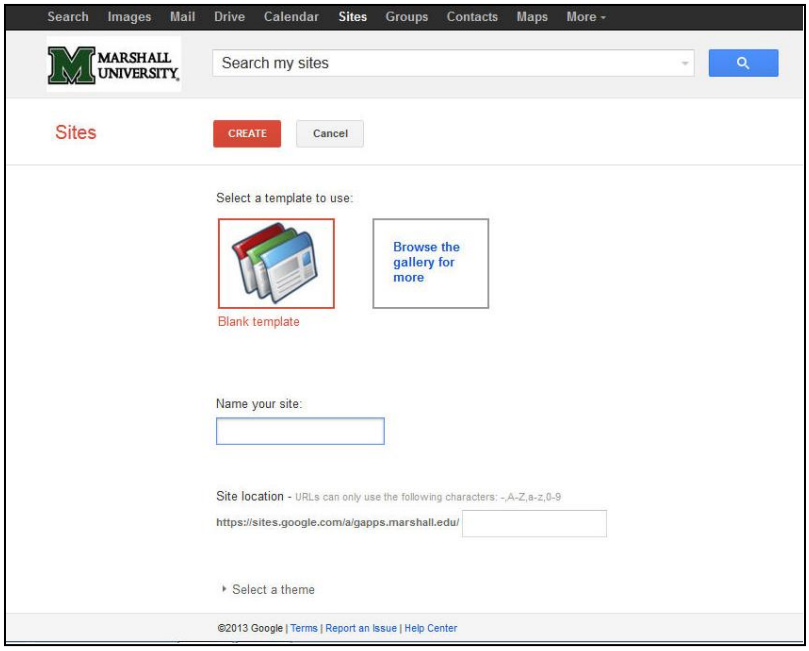
2) Logon using your MUNET credentials- your Marshall username and 6-digit password (i.e. Username: hogsettd, password: LKJNFV)
3) Once you sign in, an account will be created using your Marshall username.



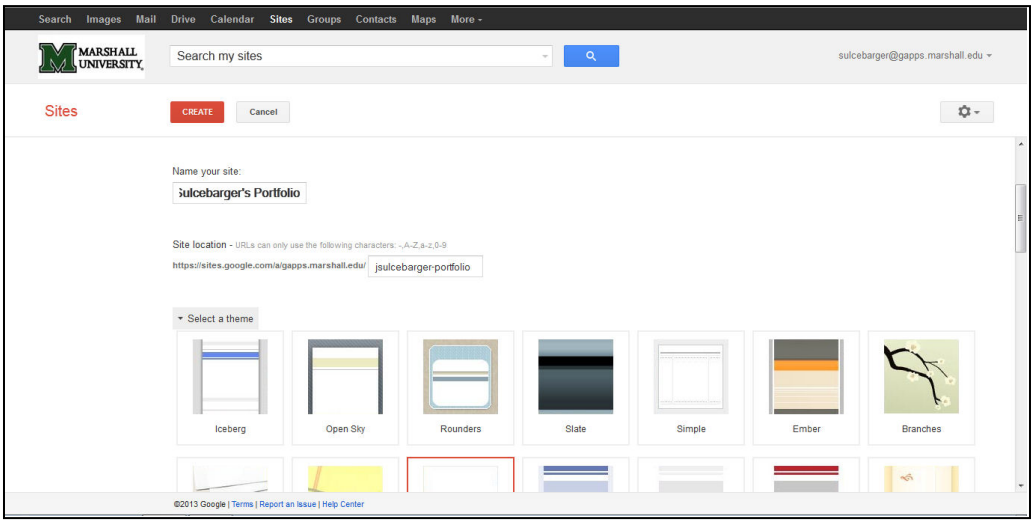
4) Click on the red "Create" button on the left sidebar to begin creating your website.



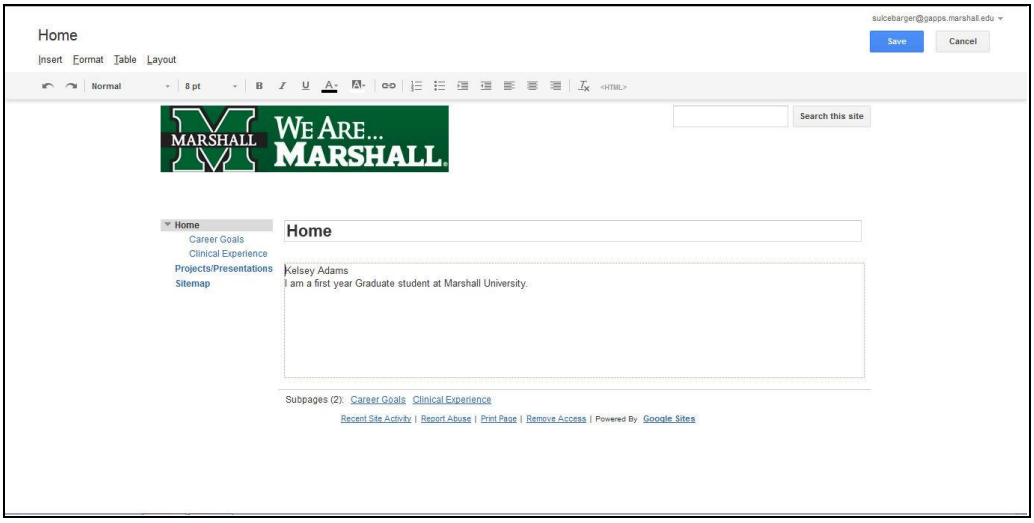
5) You will then have to name your site and select a template. A Marshall template can be found under "Browse Gallery for More".
   Tip: You can customize your site's URL without changing the name of your site.



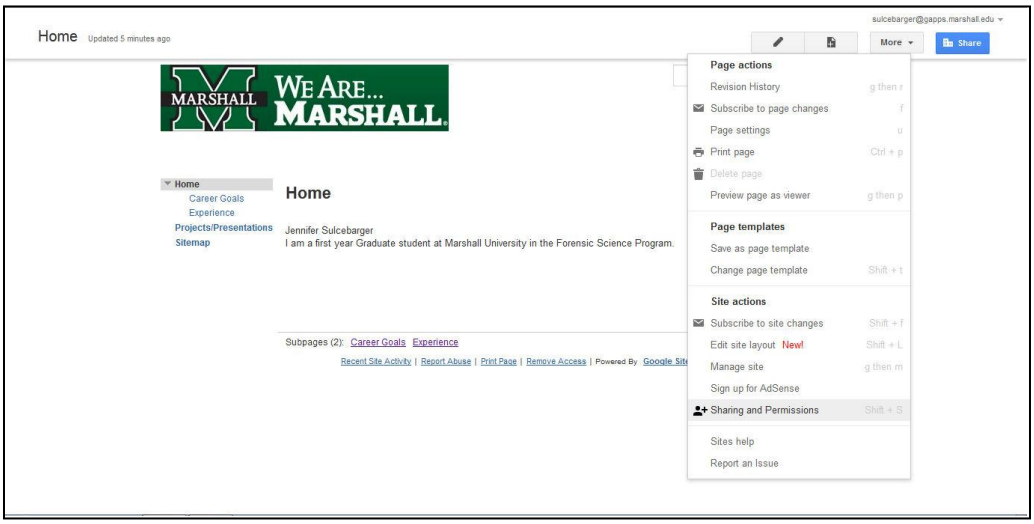
6) Once you've selected a template, you can choose a theme. Under "More Options" you can set the categories and change the site description.

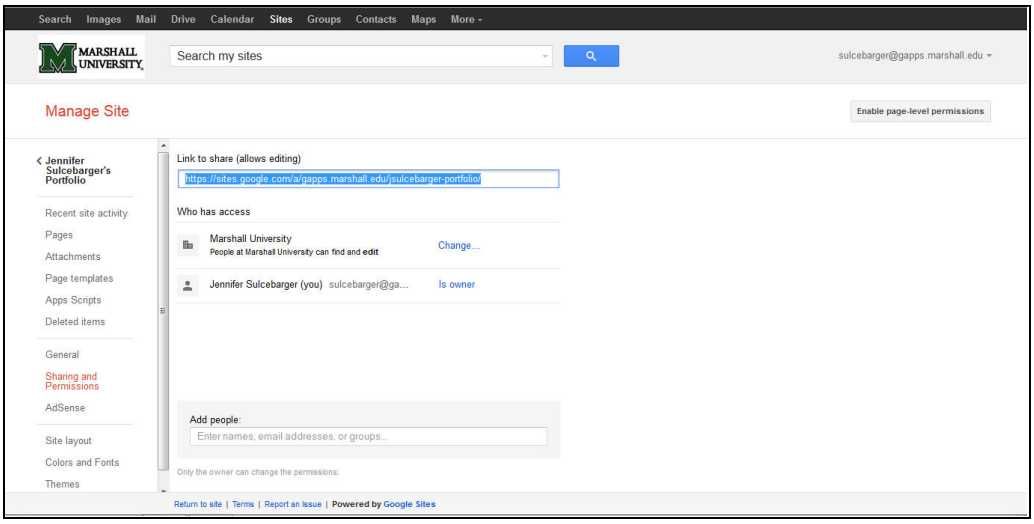


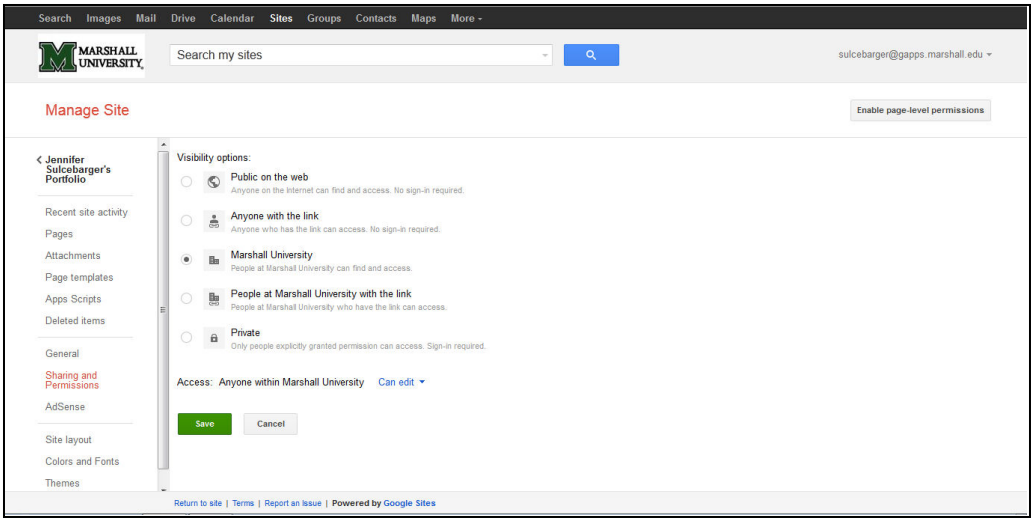
7) Click the red "Create" button at the top to finalize.
8) In the upper right, click the "Edit" button. You will be able to change the page title as well as the description content.
   Tip: Each page can be customized from the "Edit" button.



9) To the right of the "Edit" button, click the "More" tab. Under "Sharing and Permissions" you can choose who is able to view your site. Once you've chosen your settings, clicking on your page name to the left will return you to your home page, where further edits can be made.

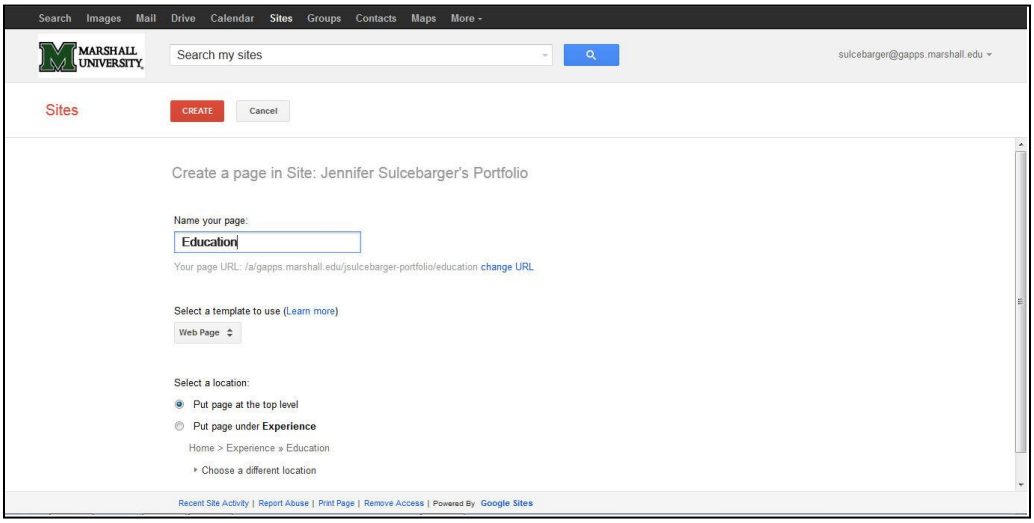




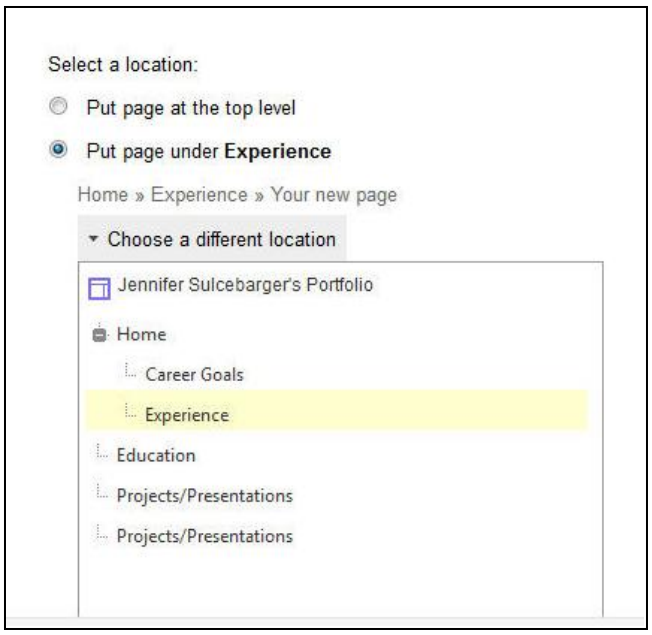


10) To create a new page, click the "New Page" button next to the "Edit" button. You can name your new page, choose its template, and customize its URL.
Tip: There are multiple page templates available.

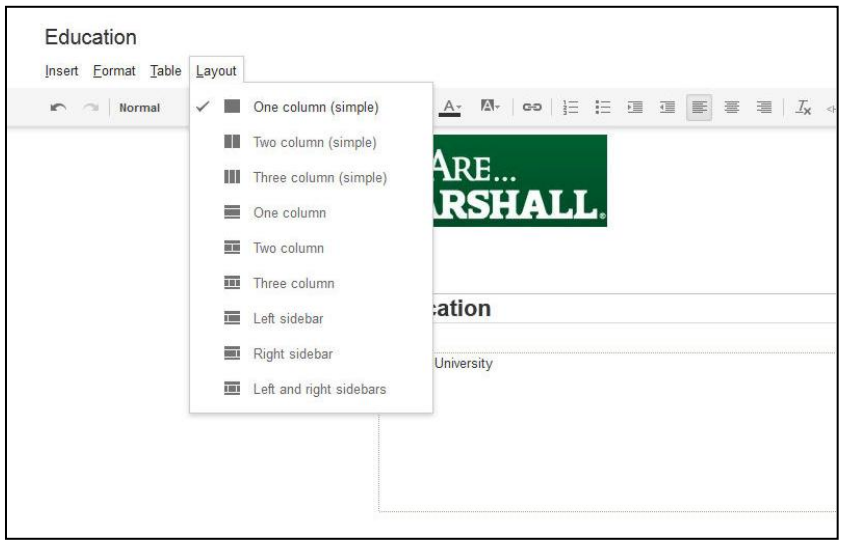
- Web page- simplest, most basic; standard formatting; can upload documents
- Announcements- this will display posts in chronological order with the newest first; blog formatting
- File cabinet- allows you to store, organize, and share uploaded files; page subscribers are notified when files are added, changed, or removed
- List page- can make and sort lists of information; page subscribers are notified

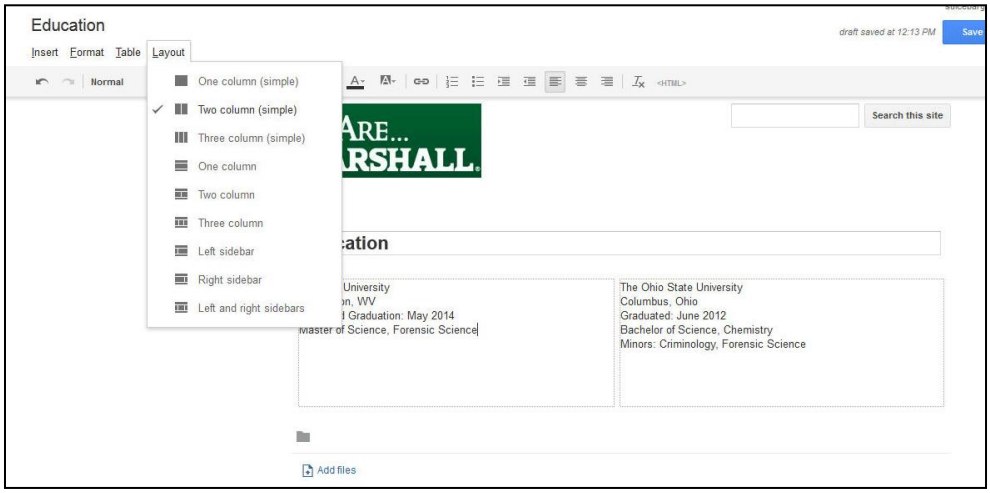


11) You can also create a subpage for any page. When creating a new page, select location as "Put page under…" You can choose to put it under the page you initiated the create from, or choose a different parent page.

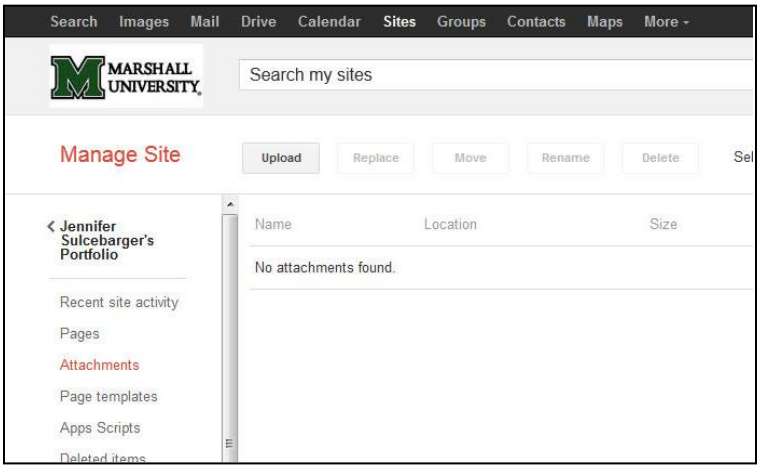


12) Once you have created your new page, multiple formatting tabs appear at the top left. If you want to change the layout of the information within the page, you can do so under the "Layout" tab. There are also options to insert pictures, video, tables, etc. For example, to create columns on the page, click "Layout" then the number of columns you wish to create.

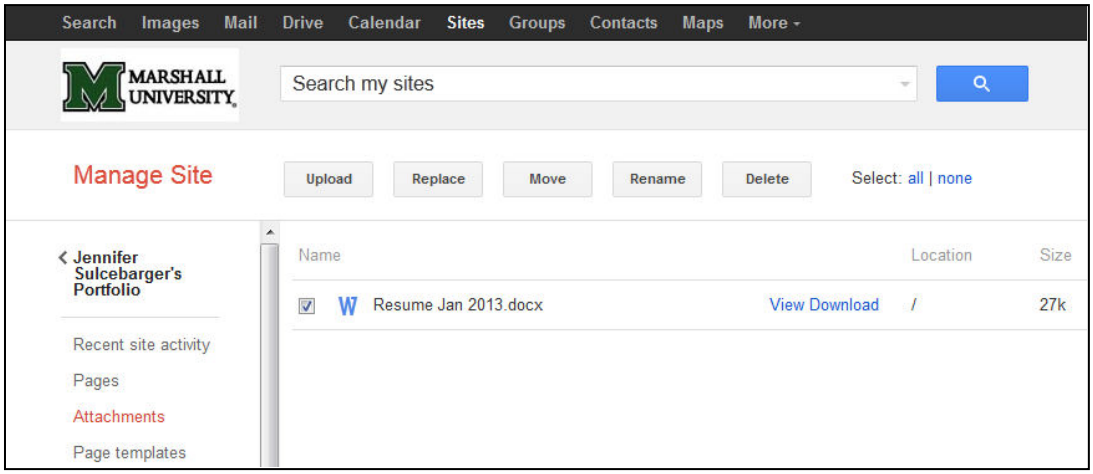




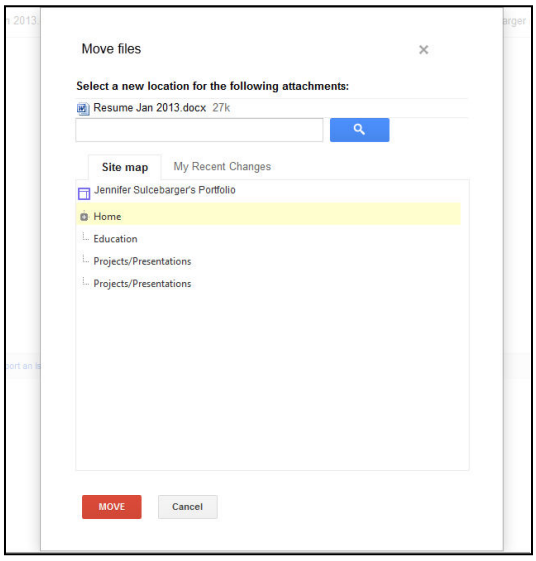
13) To upload a document to a page, you can go to the “More” tab, select “Manage Page”, then click “attachments” on the left sidebar.



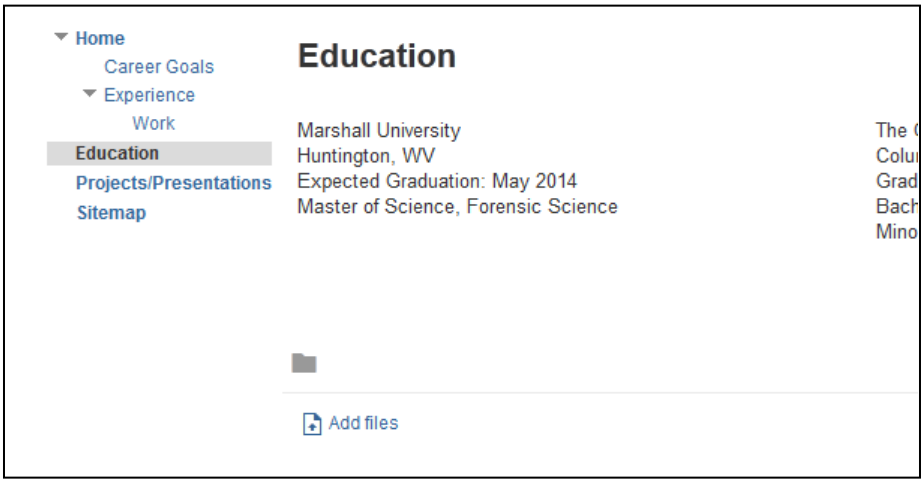
Click the “Upload” button at the top, then select your document. Once the document is uploaded, you can check the box next to the desired file. The buttons on the top will become highlighted and you can choose to edit the attachment.



To move a file to a particular page, you can select “Move” and choose the page under which you want the file to appear.

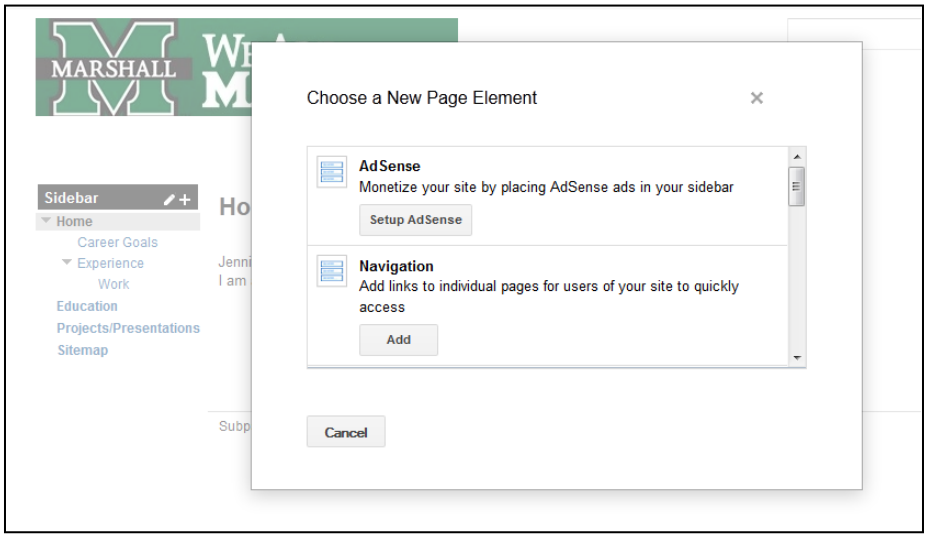


You can also upload a file directly to a page. While on the page you want to attach a file to, click the "Add Files" button at the bottom of the page and select the desired file.



Additional Tips

- To move or delete pages, use the options under the "More" tab at the top. The "Delete Page" option will only work for the current page.
- You can preview how your site will look to viewers under the "More" tab.
- If you want to change a page's URL after it has been created, you can do so by going to "More" then "Page settings".
- To edit the navigation sidebar, go to "More" and "Edit Site Layout". Hover over the sidebar and click. You will be able to choose how many levels are displayed on the sidebar. You can also add elements to the sidebar. Hover over the sidebar and click the "+" to the right of "Sidebar".



MARSHALL

CAREER SERVICES

Examples of Networking e-mail: Weak and Strong

1681 5th Avenue | (304) 696-2370 | www.marshall.edu/career-services

Weak example:
Subj: Hello

Dear Mr. Smith,
My name is Jane Doe and I'm a junior marketing major at Marshall University looking for internships this summer. I saw your information on the Marshall Mentor Network and was wondering if you might be able to help me. I have an interview in three days at a branch of your company and was hoping to speak with you either tomorrow afternoon or Wednesday after 5PM. If you are not available during those times, perhaps you could respond by email to these questions:

1. What kinds of interview questions should I prepare for?
2. What are the main differences between your company and the other top 3?

What are the most important trends in the marketing industry?

Thanks,
Jane Doe

Why the e-mail above is weak:

- The subject line is meaningless to the recipient.
- An e-mail does not need to be written like a telephone script; the sender's name closes the e-mail. No need to state your name at the start.
- By e-mailing only three days before her scheduled interview and offering limited options for speaking with the alumnus, Jane Doe appears unprofessional, presumptuous, and inflexible.
- It is important to ask to schedule a time to speak at the alumnus' convenience giving as much advanced notice as possible. You should work your schedule around his or hers.
- She is asking him to help and do things for her before he knows anything about her. You need to make a good impression on someone before asking him/her to do you a favor.
- It is inappropriate to ask the alumnus to answer questions via e-mail, especially in the first e-mail initiating contact. What takes you a few words to ask could require a lengthy and involved response on the part of the alumnus.
- The questions asked should be researched by the job seeker. Asking these questions, and expecting someone else to answer, makes the job seeker look lazy.

MARSHALL

CAREER SERVICES

Examples of Networking e-mail: Weak and Strong

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Strong example:
Date: February xx, yyyy
Subj: Marshall Mentor Network contact from marketing student

Dear Mr. Smith,
I located your contact information through the Marshall Mentor Network and was hoping that we may be able to connect over the telephone for 10-15 minutes at your convenience. I would love to learn more about your background and the marketing industry in Southern West Virginia.
Currently, I am a junior marketing major at Marshall University and am interested in exploring internship opportunities in the field this summer. I am specifically interested in value-based marketing strategies, advertising, and communications.
Thank you for your time. I sincerely hope to hear from you. *(Note alternate ending below.)*

Cordially,
Jane Doe
Marshall University class of 2011

(Alternate ending if Jane has a phone number for Mr. Smith:)
Thank you for your time. I will also call you in the next day or two to see if we might arrange a time to speak. *(Why: By indicating she will call, Jane is taking the initiative, instead of asking Mr. Smith to get in touch with her. By writing in advance of calling, she is giving him the opportunity to be prepared for her call.)*

Why the e-mail above is strong:

- The subject line is meaningful to the recipient.
- She's not demanding time, and she's not telling the alumnus to do anything. She is expressing a hope that they can speak with one another.
- She is indicating an interest in learning about Mr. Smith and his work. Expressing interest in others is a courtesy, and most people are willing to talk about their work.
- She provides enough information about herself for the recipient to know her basic interests; she keeps the information brief.
- She is writing in February, planning ahead for summer, showing she is not scrambling at the last minute to seek a summer internship.
- If there is something particular about his background that interests her, she could mention that. (Just be careful not to sound like you just want to work for the person's employer, and that is the only reason you are writing.)

MARSHALL JOBTRAX

Marco Marshall
12 Penny Lane
Huntington, WV 25705

January 11, 2009

Ms. Mary Smith, Hiring Director
HR Department
Merck Pharmaceuticals
Edison, NJ 08529

Dear Ms. Smith:

Please accept my cover letter and my resume as an application for the Pharmaceutical Sales Representative position, which was advertised at JobTrax, Marshall University's employment website, on November 12, 2008. I'm also writing at the suggestion of Bill Moyers, who recommended that I apply for the position.

As you will note from reviewing my resume, I have a BS in Marketing and one year of outside sales experience along with excellent communication and analytical skills. I am task oriented, diplomatic and able to interact professionally and socially with individuals from all backgrounds. Through my performance, management style and product knowledge at my current position, I have earned the recognition and respect from the upper management. I have become the company troubleshooter, frequently called to handle problem accounts that no one else seems to be able to save.

I feel that my education, experience, enthusiasm and persuasive ability would be a great asset to Merck Pharmaceuticals.

I would welcome the opportunity to meet with you and discuss my qualifications in detail. I look forward to your reply.

Sincerely,

Marco Marshall

Enclosure: Resume

MARSHALL
CAREER SERVICES

Cover Letter Example Formatting Guide

1681 5th Avenue | (304) 696-2370 | www.marshall.edu/career-services

John A. Smith
123 Third Street | Huntington, WV 25755 | (304) 555-5555 | jonasmith@marshall.edu

May 19, 2011

Ms. LeAnna Brown, Business Manager
Search Committee Chair
Department of Housing & Residence Life
One John Marshall Dr.
Huntington, WV 25755

Dear Ms. Brown:

I am applying for the Associate Director of Facility Management position that you advertised with Marshall University's Career Center on May 7, 2011. I was pleased to see that the requirements and experiences you seek exactly match mine. I have enclosed my resume.

Earlier this month I received by M.B.A. degree from Marshall University . In May 2009 I received my B.A. in Communication Studies from West Virginia State University. While at WVSU I worked my way through college with jobs in university housing by being a Resident Assistant, Front Desk Attendant, and Facilities Manager. I am currently the Assistant Manager at the Holiday Inn in Barboursville, WV.

In my current position I supervise and coordinate the schedules of over 20 full-time and 10 part-time staff members. I also am responsible for ensuring that the facility meets state codes. I was recently recognized as the Assistant Manager of the Month in the southeast region for providing excellent service in my 2 years with Holiday Inn. With my experiences and familiarity with university housing and facility management, I believe I am a perfect match for your Associate position.

Can we get together at your earliest convenience to discuss what I can contribute to my alma mater? You may contact me at (304) 555-5555 or at my address above. I look forward to talking with you soon.

Sincerely,

John A. Smith

John A. Smith

Enclosure

MARSHALL

CAREER SERVICES

Cover Letter Formatting Guide

1681 5th Avenue | (304) 696-2370 | www.marshall.edu/career-services

John A. Smith

123 Third Street | Huntington, WV 25755 | (304) 555-5555 | jonasmith@marshall.edu

- Use the same heading from your resume.

Date

Employer's Name
Title
Organization
Street Address
City, State, Zip Code

Dear _____:

- Address to a specific person if possible. Call for a name if not listed. Use Mr. or Mrs.
- If name is unavailable use a title, Ex: Dear Human Resources Director, Dear Hiring Manager, Dear Search Committee Chair:

First Paragraph:

- State the reason you are writing the letter – position you are applying for or inquiring about
- Grab the attention of your audience
- Source of referral, if any
- Include your interest in the position/organization
- Flatter your audience by including organization information found through research
- End the paragraph with a persuasive statement about why you are qualified for the position or why you are the ideal candidate

Second Paragraph:

- *Demonstrate why you are qualified for the job*
- Emphasize what you can contribute to the organization
- Give concrete examples of your skills and experience – prove it
- Highlight information found on the resume, but do not simply repeat your entire resume
- Easy method – choose your top 3 skills that relate to the position and give a specific example for each
- May be 1-2 paragraphs

Final Paragraph:

- Reiterate your interest in the position
- State your appreciation of the employer's consideration
- Include your intentions for follow-up
- *Phone number/e-mail and best way to contact you*

Sincerely,

- *4 spaces*
- Include your signature

Your Name (First and last name typed)
(submitted electronically)

- *Include this statement if you submit your cover letter via email or another electronic method*

Enclosure (Indicates something more than the letter is included in the envelope. Do not include this if you are e-mailing your resume/cover letter.)

MARSHALL

CAREER SERVICES

Why your Résumé gets tossed

1681 5th Avenue | (304) 696-2370 | www.marshall.edu/career-services

The average recruiter sees 5,000 résumés a year. Any legitimate reason he or she finds to make one disappear makes his or her life that much easier — and yours that much harder. Here, top-level recruiters reveal how candidates blow their chances to get a foot in the door.

Numbers don't add up

If accomplishments can be quantified, do it — but use discretion. Brandishing borderline performance numbers signals a lack of experience and bad judgement. "Phrases like 'managed a budget of $500,000' or 'led a team of two' might catch my eye in a bad way," warns Olaf Wecksser, a former recruiter for McKinsey & Co. Better to spin it as "managed company's largest budget."

Adds Alexandra DeMarino, a Citigroup recruiter: "If a small number is impressive, you absolutely have to put it in context." Because you can't provide context for academic numbers, don't include GMAT scores below 650 if you're targeting a top firm. DeMarino suggests bragging about nothing less than a 3.7 GPA.

Formality Takes a Vacation

Don't succumb to the informality of E-mail. "If you send a cover letter by E-mail that starts with 'Hi,' it and your résumé will probably end up in the trash," says Cynthia Shore, an assistant dean at the university at Buffalo School of Management and former director of its career-resource center. Treat an E-mail as you would a proper letter: Instead of "Hi," write "Dear Mr. Case." Instead of "Thanks," conclude with "Sincerely."

Keywords are Overused

It's true that recruiters sometimes use scanners to sort through résumés looking for certain keywords. But résumés appear contrived when candidates consciously try to include them. Describing a business-development position using such terms as "needs assessment" and "contract analysis" in order to squeeze in more keywords is a misguided strategy. Assume that a human being — not a computer — will be reading the résumé. After all, these days fewer than 25 percent of all recruiters even use scanners.

Things get too Personal

"If you mention your age, we have to trash your résumé," says Jeremy Eskenazi, vice president of talent acquisition at Idealab!, the California incubator firm. Since it's illegal for a company to solicit a candidate's age, race, or marital status during the hiring process, firms have adopted a "don't tell" policy to avoid potential bias suits. Many won't risk even having it handed to them.

It Looks too Fancy

"A recruiter who receives résumés in pretty plastic folders will likely toss them," says Dave Opton, CEO and founder of ExecuNet, an online executive recruiting service. "I don't have time to take the damn things apart." Another faux pas: Folding a résumé so that it fits into a standard business envelope. Heavy-stock paper that retains its crease can be a nuisance. Says Opton: "They're easier to store and photocopy if they're flat."

Also, don't try to differentiate your résumé with boxes or ornate lettering. When recruiters see a résumé that's designed differently, they think the person's trying to hide something. Instead, focus on content. Your résumé will rise to the top of the pile.

Article by Sora Goldsmith, WetFeet.com, September 2009

www.marshall.edu/career-services

MARSHALL JOBTRAX

NAME

address,
phone, email

CAREER OBJECTIVE

(List type of job you are seeking. Example: To obtain a position in accounting, banking or finance where I could utilize my education and experience in ……., ……., ……., …….. .)

SKILLS

(List several of your strengths or skills that are relevant to the position you are applying for.)

- xxxxxxxxxxx
- xxxxxxxxxx
- xxxxxxxxxxxxxxx
- xxxxxxxx
- xxxxxxxxxxx

EDUCATION

Institution name, Location, State
Degree type, i.e. B.A.
Major, minor Graduation date
GPA

INTERNSHIP

(List internships, student teaching, or other clinical experiences)

WORK EXPERIENCE (List employers, list most recent experience first and work back in reverse chronological order)

Employer name, Employer location, state
position title Employment dates,

- job duties
- job duties
- job duties
- job duties

Employer name, Employer location, state
position title Employment dates,

- job duties
- job duties
- job duties
- job duties

HONORS & ACTIVITIES

List your accomplishments, honors, memberships, volunteer work, etc.

REFERENCES

"Provided upon request" or "Attached"

(Do not list names of references on your resume. Use a separate sheet with names and phone numbers of individuals who have agreed to provide references for you – "Provided upon request"

If references are required as a part of the application process and you are attaching them with your resume, write "Attached.")

Mary Smith

210 Forrest Bay, Huntington, WV 27509
Phone: 304.555.5555
E-mail: smith007@marshall.edu

OBJECTIVE

To obtain a position in the accounting field, where I could utilize my education, management and customer service experience.

SKILLS

- *Strong academic background in accounting and finance*
- Excellent communication skills
- Excellent time and project management skills
- Working knowledge of Microsoft Office

EDUCATION

Marshall University Huntington, WV
B.B.A. Accounting, *GPA: 3.85* — Expected graduation - May 2010

INTERNSHIP

Blake & McCoy — Huntington, WV
Accounting Intern — January 2008 - May 2008

- Performed general accounting duties
- Prepared individual tax returns under direction of CPAs
- Used computerized accounting system to enter and process client data
- Prepared corporate accounts payroll

WORK EXPERIENCE

Chase Bank — Huntington, WV
Note Clerk *(part-time)* — March 2006 - Present

- Calculate and adjust interest on commercial and mortgage loans
- Call existing and potential clients with new service and product offers
- Provide customer service

Best Buy — Barboursville, WV
Shift Manager — June 2000 - February 2006
Credit Associate — July 1999 – May 2000

- Supervised staff of six employees
- Processed credit applications
- Solicited credit customers in person and through telemarketing

HONORS & ACTIVITIES

- Marshall University Dean's list; Fall 2007, Spring 2008, Fall 2008
- Accounting Club, secretary
- Huntington Area Habitat for Humanity, volunteer, 2001 to present

REFERENCES

Available upon request

RESUME WORKSHEET-What do I include on my resume?

Name

Address
Phone Number
Email Address

OBJECTIVE

What kind of work or position are you seeking? (Be specific)

SKILLS

- *What skills do you bring to the job?*
- *No more than four or five (use bullets)*

EDUCATION

List education experience with your college experience (DO NOT LIST HIGH SCHOOL)
Name of Degree and Major/Graduation Date
Name of University/Location (City,State)

INTERNSHIP

Describe it as you would a regular work experience (use bullets)

STUDENT TEACHING

Describe it as you would a regular work experience (use bullets)

WORK EXPERIENCE

List experiences starting with your most recent job. You can also include volunteer work experience (if relevant to position).

Your Job Title/Date started to Date ended (or use "Present" if this is your current job)
Place of Employment/Location of employment (City, State)

- *Highlight responsibilities/experiences (use bullets)*

HONORS & ACTIVITIES

- *Use your college information- unless your high school award was exceptional (use bullets)*

REFERENCES

DO NOT list your references on your resume. Explain how the reader can obtain them.
A separate enclosed page
Request copy of credential file from Career Services
Available upon request

EXAMPLE RESUME

Mary Smith

210 Forrest Bay | Huntington, WV 25709
Phone: (304) 555-5555
Email: smith00007@marshall.edu

OBJECTIVE

To obtain a position in the accounting field, where I could utilize my education, management and customer service experience

SKILLS

- Strong academic background in accounting and finance
- Solid communication, leadership, and organization skills
- Working knowledge of Microsoft Office
- Hard-working and reliable; able to work well independently

EDUCATION

B.B.A. in Accounting, GPA: 3.85 — Expected: May 2012
Marshall University — *Huntington, WV*

INTERNSHIP

Accounting Intern — January 2011- May 2011
Blake & McCoy — Huntington, WV

- Performed general accounting duties
- Prepared individual tax returns under direction of CPAs
- Used computerized accounting system to enter and process client data
- Prepared corporate accounts payroll

WORK EXPERIENCE

Note Clerk (part-time) — March 2011 – Present
Chase Bank

- *Calculate and adjust interest on commercial and mortgage loans*
- Call existing and potential clients with new service and product offers
- Provide customer service

Shift Manager — February 2010 – July 2010
Credit Associate — August 2009 – January 2010
Best Buy — Barboursville, WV

- Supervised staff of six employees
- Processed credit applications
- Solicited credit customers in person and through telemarketing

HONORS & ACTIVITIES

- Marshall University Dean's List: Fall 2007, Spring 2008, Fall 2008
- Accounting Club, secretary
- Huntington Area Habitat for Humanity, volunteer, 2001-Present

REFERENCES

Available upon request

Time Management

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
7AM					
7:30AM					
8AM					
8:30AM					
9AM					
9:30AM					
10AM					
10:30AM					
11AM					
11:30AM					
12PM					
12:30PM					
1PM					
1:30PM					
2PM					
2:30PM					
3PM					
3:30PM					
4PM					
4:30PM					
5PM					
5:30PM					
6PM					
6:30PM					
7PM					
7:30PM					
8PM					
8:30PM					
9PM					
9:30PM					
10PM					
10:30PM					
11PM					
11:30PM					
MIDNIGHT					

TIME MANAGEMENT SELF-ASSESSMENT

(from The University of Western Ontario)

Are you a good time manager? Respond to the following inventory, indicating "Yes" if the statement applies more often than not. Choose "No" if the statement does not apply most of the time.

	Yes	No
1. I make lists to help organize things that I have to do.	___	___
2. I often procrastinate when faced with tasks.	___	___
3. I make good use of small blocks of time.	___	___
4. I seldom prioritize among tasks.	___	___
5. I use my time wisely.	___	___
6. I find it difficult to resist pressure from others for my time.	___	___
7. I plan how my goals will be reached.	___	___
8. I lack balance in my life.	___	___
9. I can motivate myself to complete even boring tasks.	___	___
10. I have trouble concentrating on a task.	___	___

Count and total the odd-numbered items you responded to with a "Yes": ___

Count and total the even-numbered items you responded to with a "No": ___

Add these totals together: _____

How did you do?

8 -10	Congratulations! You have strong time management skills.
5 – 7	You have some time management skills that you can build upon.
0 – 4	You can benefit from strengthening your time management skills.

Time Management Obstacles.

1. ***Email*** - Limit the number of times you check it daily, as well as time spent on replies.
2. ***Internet Use*** - Set a timer for 30 minutes to stay aware of how much time is passing.
3. ***Television*** - Plan ahead for which shows you will watch. Don't turn the TV on randomly.
4. ***Phone/Pager*** - Try to wait and call back when you have a study break or have finished your homework. If you do answer when a call comes in, tell your friends you will call them back at the end of the study session. They will still like you!
5. ***Distractions*** - Eliminate as many audio/visual distractions as you can. Choose places and times to study when roommates/others are busy with quiet activities or are gone.
6. ***Lying Down*** - Leads to sleepiness when studying. Don't go there.
7. ***Errands*** - Working in small errands daily will help you avoid having to spend a whole day weekly playing.
8. ***Procrastination*** - A common complaint. Don't put off until tomorrow what you can do now!

**Collected from the University of Texas at Dallas*

Where does your time go?

Number of hours of sleep each night ..... _____ x 7 = _____

Number of hours spent grooming each day ..... _____ x 7 = _____

Number of hours for meals/snacks, including preparation/clean-up time ..... _____ x 7 = _____

Travel time to and from campus ..... _____ x 5 = _____

Number of hours per week for regular activities (chapter meetings, leadership/service activities, intramurals, church, etc.) ..... _____ x 7 = _____

Number of hours per day for errands, etc..... _____ x 7 = _____

Number of hours of work per week ..... _____

Number of hours in class per week ..... _____

Number of hours currently spent doing homework per week ..... _____

Number of hours per week with friends, socializing, going out, watching TV, etc..... _____

Weekly Total = _____

There are 168.0 hours in a week

- _____ hours of activities

= _____ *potential hours to study*

MARSHALL
CAREER SERVICES

The First Question of Every Interview

1681 5th Avenue | (304) 696-2370 | www.marshall.edu/career-services

"Tell me about yourself."

The first question at all interviews is not a question, but a request. "*Tell me about yourself.*" You have been told all your life not to brag about yourself, so you become uneasy. **Get over it!** This is about exuding confidence and putting your best foot forward. Do not think of it as bragging, but good marketing. Three minutes should suffice. Any longer and you may be perceived as a one who chatters too much.

Be prepared

- Have your response ready and stick to it
- Don't memorize it—you will sound stilted and fake
- Follow an outline and fill in details

Where to start

- Start no earlier than college unless you did something spectacular before then
- Example: "After graduating from high school..."

Words of Caution

Preparing helps you to avoid giving away information that could prejudice the interview. Such information is sometimes illegal for the interviewer to ask for.

- Avoid mention of any members of your family; of religion; political affiliations; marital status; sexual orientation; and/or most disabilities
- Avoid divulging any personal information that has nothing to do with your ability to fulfill all the functions of the job
- Never share any weakness or deficiency or use demeaning words or phrases to describe yourself — even jokingly

Topics for Discussion

- Why you chose to attend Marshall University.
- Elaborate on what you listed in the skills section of your résumé and point out how they match the skills the prospective employer is searching for
- Talk about what you gained from the most routine jobs. *Example: "I have employed marketing and customer-service skills in the restaurant field. In my most recent position, I marketed appetizers, desserts, and other add-ons to customers' orders which added value to their dining experiences. I would like to apply the same sales savvy to this job."*
- Outstanding achievements and/or experiences
- How well your preparation fits the needs of the organization
- Communicate your desire and enthusiasm for the job you are applying for and back it up with examples you found while researching the company
- Provide information about experiences you were successful at, i.e. sports, travel, leadership, etc.
- State your work philosophy
- Give examples highlighting your team skills

Final Advice

- Practice your script to become comfortable with it and not feel like you're bragging
- Never lie about yourself, or embellish. You will get caught by a good interviewer.
- Use shortcomings as a positive thing that you are working to correct, or have corrected.

www.marshall.edu/career-services

MARSHALL JOBTRAX

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CAREER SERVICES

Mock Interview Preparation

1681 5th Avenue | (304) 696-2370 | www.marshall.edu/career-services

What is a Mock Interview?

- A mock interview is a situation interview. Interviews will be conducted by Career Services staff members or professionals within your field
- Although your mock interviewer is well-experienced in conducting the interview, he/she may be unable to answer specific questions.
- The role of the mock interviewer during this portion of the interview is to advise you on appropriate responses and guide you to resources that may provide you with tips on appropriate questions to ask.

What to expect from start to finish

- Your mock interview experience begins the moment that your interviewer comes to greet you in the waiting area of the Career Services Center. You should start with a firm handshake and appropriate greeting of the interviewer, use his or her name.
- You and your interviewer will go into an interview room. The mock interview itself will last approximately 30 minutes, and the interview will be discussed and critiqued for approximately 15-30 minutes.
- At the end of your mock interview, you will have the opportunity to talk with the interviewer about any particular questions or concerns you have about the interviewing process. Furthermore, you will receive from your interviewer honest and helpful feedback.

Mock Interview Checklist

- Register on Marshall JobTRAX www.marshall.edu/career-services and update your profile
- Polish your résumé to accurately reflect your education, skills, and experience. You must present a copy during your interview.
- Practice makes perfect. Self-evaluate your professional attire, greeting/introduction, body language, attitude, responses to interview questions, and oral communication.
- Research the employer that you would like to work for. Develop questions to ask the career counselor/coach about the organization you would like to work for.
- Dress professionally for the interview.
- Arrive 10 minutes before the interview at the Career Services Center and sign in at the kiosk.

No Show Policy

Career Services staff members feel strongly about missed mock interviews. Cancellations must be made 24 hours in advance of the interview appointment. If you fail to cancel one day prior to the interview, or simply do not show up, you forfeit your privilege to schedule another mock interview.

www.marshall.edu/career-services

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Behavioral Interview Questions

1681 5th Avenue | (304) 696-2370 | www.marshall.edu/career-services

Behavioral interview questions are those asked by interviewers which must be answered by relating an example of something you have done (a behavior) that relates to the question asked. Review each of the questions listed below.

- Describe a situation in which you were able to use persuasion to successfully convince some one to see things your way.
- Describe a time when you were faced with a stressful situation that demonstrated your coping skills.
- Give me a specific example of a time when you used good judgment and logic in solving a problem.
- Give me an example of a time when you set a goal and were able to meet or achieve it.
- Tell me about a time when you had to use your presentation skills to influence someone's opinion.
- Give me a specific example of a time when you had to conform to a policy with which you did not agree.
- Please discuss an important written document you were required to complete.
- Tell me about a time when you had to go above and beyond the call of duty in order to get a job done.
- Tell me about a time when you had too many things to do and you were required to prioritize your tasks.
- Give me an example of a time when you had to make a split second decision.
- What is your typical way of dealing with conflict? Give me an example.
- Tell me about a time you were able to successfully deal with another person even when that individual may not have personally liked you (or vice versa).
- Tell me about a difficult decision you've made in the last year.
- Give me an example of a time when something you tried to accomplish failed.
- Give me an example of when you showed initiative and took the lead.
- Tell me about a recent situation in which you had to deal with a very upset customer or co-worker.
- Give me an example of a time when you motivated others.
- Tell me about a time when you delegated a project effectively.
- Give me an example of a time when you used your fact-finding skills to solve a problem.
- Tell me about a time when you missed an obvious solution to a problem.
- Describe a time when you anticipated potential problems and developed preventive measures.
- Tell me about a time when you were forced to make an unpopular decision.
- Please tell me about a time you had to fire a friend.
- Describe a time when you set your sights too high (or too low).

MUFSP ALUMNI DIRECTORY

Class	First Name	Last Name	Maiden	Email	Title	Location	Department	City	State
1997	Christine	Anton	Mega	manton@tampabay.rr.com				Riverview	FL
1997	Thomas	Burgoyne		t_burgoyne@yahoo.com		Sunovion Pharmaceuticals	Biologic Sales	Marlborough	MA
1997	Marie	DiFilippo		difilippo@adelphia.net	Fellow	Marshall University	Pediatric Critical Care	Huntington	WV
1997	Diane	Gehres	Larson	diane.gehres@ohioattorneygeneral.gov	Lab Manager, CODIS Tech	Ohio Bureau of Criminal Identification and Investigation		London	OH
1997	John	Giacalone		jrgiacalone@hotmail.com	Criminalist III	DPS Forensic Lab	Chemistry Unit		Anchorage
1997	Tina	Moroose	Urbaniak	tmoroose@aol.com		West Virginia University		Morgantown	FL
1997	John	Pritchett			Forensic Biologist	Indiana State Police		Indianapolis	IN
1997	Catherine	Rushton		rushton1@marshall.edu	Instructor	Marshall University Forensic Science Center		Huntington	WV
1998	Lynn	Black		lblack@sled.sc.gov, wildcat4n6@charte	Criminalist III	South Carolina Law Enforcement Division		Columbia	SC
1998	Tia	Fenton	Ferguson		Patent Agent	Oblon, Spivak, McClelland, Mater &	Litigation Dept.	Alexandria	VA
1998	Neeralini	Galagedera		neerausa@msn.com					
1998	Bryan	Horner		bryan1horner@hotmail.com					
1998	Sanjay	Masilamani		masilam1@marshall.edu					
1998	Soraya	McClung		Soraya.m.mcclung@wvsp.gov	Lab Director	West Virginia State Police		South Charleston	WV
1998	Bridget	Murray	Ammons	bdmurray@cinci.rr.com					
1998	Howard	Myers		bmyers@wvsp.state.wv.us	DNA Section Head	West Virginia State Police	Biochemistry	South Charleston	WV
1998	Michael	Ross			Special Agent	U.S. Secret Service		Washington	DC
1998	Shannon	Ruminski		sruminski@hotmail.com	Physical Scientist/Evidenc	FBI Laboratory	Evidence Control Unit	Quantico	VA
1998	Aaron	Uhle		auhle@hotmail.com	Forensic Examiner	FBI	Latent Print Unit	Quantico	VA
1998	Misty	Williamson	Marra	marra2@marshall.edu	Sr. DNA Analyst	Marshall University Forensic Scienc	CODIS Laboratory	Huntington	WV
1998	Angela	Withrow	Zimmerma	zimmerm4@marshall.edu					
1999	Christian	Bauer			Patent Attorney and Asso	Ratner & Prestia Law Firm		Valley Forge	PA
1999	Bryan	Brubaker		bbrubaker@caci.com, bjbrubaker@hotn	Digital Forensics Analyst I	CaCI, Inc.	Knowledge Based Solutions	Arlington	VA
1999	James	Campbell			Resident Physician	Charleston Area Medical Center	Internal Medicine	Charleston	WV
1999	Yolanda	Campbell	Kapteyn	campbell24@marshall.edu	Doctor	Cabell Huntington Hospital		Huntington	WV
1999	Leigh	Caron	Schwieterr	eeyore4n6@hotmail.com	Senior GC Analyst	Katahdin Analytical Services		Westbrook	ME
1999	Kerrie	Cathcart		kerrie_cathcart@hotmail.com		Target Corporation	Latent Prints	Minneapolis	MN
1999	Krista	Denning	Haught	kldenning@hotmail.com	Pathology Resident	Allegheny General Hospital	Pathology	Pittsburgh	PA
1999	Laura	Kuyper		kuyper1@marshall.edu	Analyst/Quality Assuranc	Marshall University Forensic Science Center		Huntington	WV
1999	Gideon	Labiner		gideon.labiner@uc.edu	Assistant Professor	University of Cincinnati	College of Allied Health Scie	Cincinnati	OH
1999	Ann	Michelson		chmst@comporium.net	Forensic Chemist	Cumberland County District Attorney			PA
1999	Michelle	Miller	Snyder	msnyder@ag.state.oh.us, labfuzz@aol.c	Forensic Scientist	Ohio Bureau of Criminal Identification and Investigation		London	OH
1999	Jodie	Reed		jodie.reed@gmail.com, jmreed74@gmail.com					
1999	Jan	Sikorsky		jsikorsky@lead-america.org	Director of Academics, Sc	LeadAmerica		Boca Raton	FL
1999	Ted	Smith		smith251@marshall.edu, tsmith@wvsp.	Special Projects Manager	Marshall University Forensic Science Center		Huntington	WV
1999	Bridget	Tincher			National Forensic Science	Contract Services		FL	
2000	William	Adkins		adkins85@marshall.edu	Criminalist	Miami-Dade County Police Dept.	Forensic Biology Section	Miami	FL
2000	Rebecca	Atkinson			Fire Claim Representative	State Farm Insurance		Clifton	VA
2000	Kelly	Beatty		kbeatty@marshall.edu	Primary Paternity Analyst	Marshall University Forensic Scienc	CODIS Laboratory	Huntington	WV
2000	Jason	Berty		Jason.J.Berty@usdoj.gov	Special Agent	ATF	Charleston WV Field Office	Charleston	WV
2000	Jason	Burns			Special Agent	ATF		Columbus	OH
2000	Jason	Chute		jchute@marshall.edu	DNA Technical Leader	Marshall University Forensic Scienc	CODIS Laboratory	Huntington	WV
2000	Julie	Conover	Sikorsky	sikorskyj@pbso.org	Senior Forensic Scientist	Palm Beach County Sheriff's Office	Forensic Biology Unit	West Palm Beach	FL
2000	Crystal	Currey	Prather		Stay at home mom			Huntington	WV
2000	Catalin	Dogaroiu		c.dogaroiu@hud.ac.uk	Senior Lecturer	University of Huddersfield	Dept. of Forensic and Analytical Sciences		United Kingdom
2000	Debra	Edwards		edward12@marshall.edu					
2000	Samantha	Evans		samantha.evans@doj.ca.gov	Senior Criminalist	California Department of Justice	Bureau of Forensic Services	Santa Rosa	CA
2000	Matthew	Farr		hokiematt@att.net, hokiematt@hotmai	DNA Analyst			Ammendale	MD
2000	Melissa	Hart	Kothari	mhartkothari@gmail.com	Quality Manager	Nationwide Children's Hospital		Columbus	OH
2000	Allison	Hunt		morguechic@me.com	Forensic Pathologist	Riverside County Sheriff-Coroner's Office		Perris	CA
2000	Debra	Jarosz				MWG Biotech	Automation Section	High Point	NC
2000	Tracey	Johnson		tlabrezinski@yahoo.com	Technical Leader	AFDIL	Automation Section	Rockville	MD

2000	Sharon	Koon	Lemons	Sharon.e.lemons@wvsp.gov	Assistant Laboratory Dire	West Virginia State Police		South Charleston	WV
2000	Masoud	Larijani		max.larijani@ohioattorneygeneral.gov	Forensic Scientist	Ohio Bureau of Criminal Identificati	CODIS Unit	Columbus	OH
2000	Mark	Losko		mlosko@yahoo.com	Crime Laboratory Supervi	Ohio Bureau of Criminal Identificati	Firearms, Latent Prints, Trac	London	OH
2000	Karma	Outhouse	Hudson	karmahudson@gmail.com					
2000	Leslie	Rosier	Mitchell	leslie_rosier@yahoo.com	DNA Analyst III	Orchid Cellmark		Germantown	MD
2000	Nikia	Sherman	Redmon		DNA Analyst III	ReliaGene Technologies, Inc.		New Orleans	LA
2000	David	Wright		david.wright@kbi.state.ks.us	Firearms and Toolmark Ex	Kansas Bureau of Investigation	Firearms & Toolmarks	Topeka	KS
2001	Cristalle	Britton	Workman	A4N6CHMST@cs.com	Teacher			HI	USA
2001	Michelle	Dietrich	Kuk		Forensic Chemist	U.S. Drug Enforcement Administration		Washington	DC
2001	Sheema	Doshi		sheemad@yahoo.com	Teacher			Tokyo	Japan
2001	Erin	Dulaney		erindulaney@hotmail.com	Special Agent	FBI		Cleveland	OH
2001	Koren	Hanger	Powers	koren.k.powers@wvsp.gov	Forensic Analyst V	West Virginia State Police Forensic	Trace Evidence	South Charleston	WV
2001	Robert	Hansen	II		DNA Analyst	Sedgwick County Regional FSC	DNA	Wichita	KS
2001	William	Harry		bill.harry@hamilton-co.org	DNA Analyst & Serologist	Hamilton County Coroner's Laboratory		Cincinnati	OH
2001	Nathaniel	Head		Nathaniel.Head@ic.fbi.gov, nathanehea	Supervisory Special Agent	FBI	Biological Countermeasures	Washington	DC
2001	David	Hoffman			Fire Investigator	F.T.E./S.E.A., Inc.		Columbus	OH
2001	Rachel	Jackson	Hoffman		Industrial Safety Specialis	Swales Aerospace	NASA Goddard Space Flight Center		MD
2001	Carna	Meyer		meyer5@marshall.edu	DNA Analyst	AFDIL		Rockville	MD
2001	David	Miller		davidmiller10x@hotmail.com	Section Head, Forensic Ar	West Virginia State Police	Evidence Processing and Re	South Charleston	WV
2001	Amy	Wehrle							
2001	Meredith	Zuspan	Chambers		DNA Analyst	West Virginia State Police	Biochemistry	South Charleston	WV
2002	Stacy	Alexander	Bozinovski	sbozinovski@yahoo.com	DNA Analyst	Indiana State Police		Indianapolis	IN
2002	Jodi	Bailey		jodibailey21@gmail.com, sbozinovski@isp.in.gov		Palm Beach County Sheriff's Office	Forensic Biology Unit	West Palm Beach	FL
2002	Cristy	Chapman	Pruitt	chapma60@marshall.edu	Digital Evidence Examiner	U.S. Army Criminal Investigation Laboratory		Forest Park	GA
2002	Elliott	Clark			DNA Analyst I	New Jersey State Police		Trenton	NJ
2002	Brandi	Dorsey			Public Health Specialist II	Baltimore Dept. of Health & Mental Hygiene		Baltimore	MD
2002	Erin	Feazell		erin.e.feazell@wvsp.gov	Forensic Chemist	West Virginia State Police	Toxicology	Charleston	WV
2002	Karen	Howard		zimmerman1@marshall.edu	Consultant/owner	DNA Training & Consulting Services		Odessa	MO
2002	Adam	Jack		aj_4n6@yahoo.com	CSI Police Officer, [Full-tin	Rostraver Township Police Dept., [Waynesburg College]		Rostraver, [Waynes	PA, [PA]
2002	Bart	Naugle		bartnaugle@gmail.com	Senior DNA Analyst	Wisconsin Department of Justice		Madison	WI
2002	Devin	Palmer			Special Agent	ATF		Tyler	TX
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