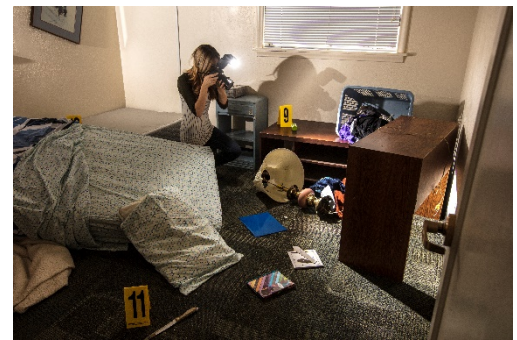




FORENSIC SCIENCE PROGRAM

UTAH VALLEY UNIVERSITY

FALL 2019 | NEWSLETTER



UVU Forensic Science Program

As the new school year begins, we want to extend a huge welcome to all of our students! Many are returning to continue and maybe even finish their forensic science degree, however, there are also many of you who have just joined the program. Just over the past year, the forensic program has grown over 20% in the total number of enrolled majors at UVU! We have worked hard to expand the program, courses and opportunities for students to excel and further their knowledge in this discipline. With this being our very first semi-annual newsletter, we wanted to focus this edition on what our program is about and what opportunities are out there for students. What are ways to get additional experience, education and become more involved in forensic events not only here at UVU, but also locally?

The UVU Forensic Science Program truly is one of its kind here in Utah. UVU is the only University in the state to offer a Bachelor's Degree in Forensic Science. We are committed to fostering a challenging and intellectually stimulating environment for all students. As individuals participate in our program, they gain an understanding and appreciation of forensic science theory, research, policy and practice. However, the most exciting part of this program, is the hands-on experience students will gain working in various disciplines associated with criminalistics, crime scene investigations, reconstruction and analysis. Our program utilizes the knowledge and experience of our amazing instructors to provide students with a practical application of what they are learning. Throughout the program, students learn AND practice techniques in chemical analysis, crime scene processing, firearms/ballistics examination, bloodstain pattern analysis, forensic photography, impression evidence, fingerprint processing/examinations, clandestine graves, forensic entomology, fire investigations, shooting incident scenes and so much more!!!

Our program offers two distinct emphases for our students, both of which provide a launching point for students' respective careers.

Forensic Science Investigation Emphasis

The Forensic Investigation emphasis provides students with the knowledge needed for a career working out in the field. Courses in this emphasis will provide a vast amount of knowledge focused on crime scene examination and analysis. Students will learn multiple techniques on crime scene processing, documentation, physical evidence collection and examination. Questions such as...How do you collect biological fluids from a scene? How are bullets matched to a specific firearm? What does a death investigator do? What do bloodstain patterns at a scene tell you? How do you find and map a clandestine grave? Can you tell where a fire originated in a house? What is the process of matching a latent fingerprint at a scene to a suspect?...are all answered as students work towards this degree path.

Forensic Science Laboratory Emphasis

Students who choose the Forensic Laboratory emphasis will learn techniques and procedures, which are currently utilized within a crime laboratory. Students receive an education with a focus on criminalistics. Students learn the application of scientific tests or techniques in collecting and analyzing physical evidence, and using that evidence to link crime scenes with victims and offenders. Students will employ theoretical and practical principles of chemistry, biology, physics and mathematics to perform forensic science work commonly conducted within a crime laboratory.

No matter which path students may choose, the forensic science program at UVU will provide a vast amount of knowledge and experience within this field. You've seen it on T.V...now EXPERIENCE IT IN REAL LIFE!!

“State and local governments are expected to hire additional forensic science technicians to process their high caseloads. Additionally, scientific and technological advances are expected to increase the availability, reliability, and usefulness of objective forensic information used as evidence in trials. As a result, forensic science technicians will be able to provide even greater value than before, and more forensic science technicians will be needed to provide timely forensic information to law enforcement and courts.” – Bureau of Labor and Statistics

UVU Forensic Science Club

Did you know there was a forensic science student club here at UVU? The UVUSFA is designed to help those interested in Forensic Science or those who are Forensic Science majors further their education in the field. The club will help expose students to real world experiences not found in the classroom as well as guest speakers, field trips, job preparation, and many networking opportunities.

By joining the club, students will be more prepared to get a job in the industry or receive help to move onto graduate school in the forensic field. If you are interested in joining the club, please send an email to uvusfa@gmail.com

International Forensic Science Honor Society



As a student in UVU's Forensic Science Program, you can become a member of the Delta Delta Epsilon, Alpha Mu Chapter. Delta Delta Epsilon is an international honor society that is dedicated to stimulating academic achievement, promoting community understanding, and advancing the fields of forensic science wherever possible.

The Alpha Mu chapter promotes the recognition and encouragement of excellence in scholarship in the Forensic Sciences here at UVU. As part of the national honor society, you will promote and encourage intellectual development, push for high achievement, promote leadership, create student and faculty dialogue, enrich your educational environment and promote attitudes of professional responsibility for the public good. Being a member of a national honor society will fuel students to continue to better the forensic science fields and those who seek employment in those disciplines.

There are a few requirements to become a member of our honors society:

- Official enrollment in UVU's Forensic Science Degree Program
- Completed at least 47 required credit hours for the Forensic Science Bachelor's Degree
- Have a minimum GPA average of 3.3

Membership dues are \$50.00 and can be paid in the Student Clubs office here on UVU campus.

For application to DDE, please visit our website https://www.uvu.edu/criminaljustice/forensic-science/student_opportunities.html and complete the application. Submit the form to amie.houghton@uvu.edu



International Association for Identification

International Association for Identification 14th Annual Tri-Division Educational Conference

*November 18-22, 2019 @ Embassy Suites,
West Valley City, UT*

The Tri-Division conference is coming this November to West Valley City! Registration is now open. As a student you will receive a discounted rate of \$100 for the entire week or \$40 per day. Education and Professional Development are core aspects of the IAI mission. The conference is a great opportunity to listen and learn from the professionals in the field. This is your opportunity to stay in tune with professional standards, latest issues with forensic science and crime scene evidence. Plus, this will give you an opportunity to network for your future careers. Many presentations provide new perspectives on cases, advanced forensic technological approaches to physical evidence and so much more.

The conference this year will have several exciting speakers focused on topics such as the Boston Bombing, Aurora Theater Shooting, Lessons from the *Cold* Podcast, Crime Scene Examinations, Suicides within the Military, just to name a few.

A complete schedule of events is coming soon! See the IAI Utah division website for more information: www.ut-iai.org

*To register for the conference, please go to:
<https://www.eventbrite.com/e/14th-annual-tri-division-educational-conference-registration-71393595165>*

UVU Forensic Science Internship Opportunities

Local Utah Agencies

- Utah County Sheriff's Office
- Salt Lake City Crime Lab
- Unified Police Department
- West Valley PD
- American Fork Police Department

Utah State Agencies

- DPS – Utah State Crime Lab
- Utah Office of the Medical Examiner

Federal Government Agencies

- Naval Criminal Investigative Service
- Federal Bureau of Investigations
- Drug Enforcement Administration

Please Visit: https://www.uvu.edu/criminaljustice/forensic-science/student_opportunities.html
For additional information & application procedures.

Have you ever wondered what it would be like to work in a crime laboratory or as a crime scene investigator? Are you unsure about what type of forensic career you want to pursue? Take the opportunity to work as an intern with a local agency. You will be able to gain knowledge, skills, experience in a real-world environment, AND receive college credit at the same time!

Our forensic science internship program will provide students with working opportunities with local, state and federal agencies both in and out of the state. Our students have interned with Utah County Sheriff's Office, Utah State Crime Laboratory, Salt Lake Police Department, Federal Bureau of Investigation and many more! Two current students in the program shared their experience of participating in the internship program - what they learned and how it will help them in their own future careers.



"Given the opportunity to complete an internship has allowed me the chance to be exposed to my future career and presented the chance to use my education in a real-life setting. I am currently interning with American Fork Police Department alongside the Evidence Technician (who is a UVU Forensic Science Graduate) where I assist with evidence intake, packaging, transportation, storing, and ensuring that the chain of custody is upheld. As I have finished a majority of my coursework, I have been able to apply the knowledge and education that I have been taught, but on a further level strengthen my understanding.

Throughout my courses, several teachers discussed the importance of properly establishing and maintaining a chain of custody to document the items involved within the case. This professional practice is crucial and has been further cemented into my knowledge as I begin searching for my future career. From the very beginning of a scene and labeling items of evidence, it is important to label each item the same in sketches, photographs, and on the chain of custody. When the item numbers do not match then this can cause the courts to reprimand the agency working the case for not upholding the chain of custody. This major error can discredit both an individual as well as an agency creating a big stress to properly document each item of evidence associated within each case.

As I continue to intern with the American Fork Police Department, I have learned that this opportunity will enhance my future career in Forensic Science. Internships not only provide hands on experiences, they provide a great foundation for networking. Utah has a small turnover rate within this field, therefore, it is important to network and work hard in order to prove yourself. While interning I have been able to establish professional relationships that can one-day help enhance my resume and references. This field can be difficult to break into as a newly graduated student, but by completing an internship I have opened myself to those individuals who are currently working in the field that can assist me in my future employment." – Whitney Bowles, *Senior*



"I had the opportunity to intern with the Utah County Sheriff's office in Spring 2019. During my internship, I set several goals that I was able to achieve with the help of my intern advisor and the other technicians who also worked there. One of my goals was to become proficient with a DSLR camera and successfully photograph a crime scene. This was completed many times and the more I did it, the better I became. The first scene was a breaking and entering as well as some vandalism. I took overall photos of the scene as well as footprints behind the building. We tried some different lighting techniques and then we lifted a few fingerprints from a door handle that I later photographed at the lab with and without enhancing the print to better see it. Another scene I photographed was a suicide scene. I photographed the outside and the inside of the car as well as the body and the hands of the victim. Being my first body scene, it was a bit nerve wracking, but I successfully did it and the photos turned out great. I believe this was very important experience because it is something that can either

make someone change majors or start to build a "callus", as in get used to seeing these kinds of scenes. I remember my internship advisor just kept asking if I was okay afterwards, because his first experience at a suicide scene frightened him a bit as well. He explained to me how he felt after and during the processing time and it made me feel better knowing nothing was wrong with the way I felt. It was completely normal! I told my internship advisor I was just in shock and had a few triggers seeing the body, but I still wanted to keep working on processing the evidence and that it was just another day on the job!

I got to play around a bit with the labs' newer camera that had a filter to better see bodily fluids and luminesce blood without any added lights. This was really cool because we were dealing with a black hoodie at the time that had blood, but you could not see it with the naked eye!

During my internship I got to process a lot of prints with superglue fuming and the chemical, Basic Yellow. I also powdered some prints in a car and on a vault. I really enjoyed the superglue fuming and then basic yellowing textured surfaces because it was easier to see once I had processed it a second time. I learned not all prints will turn out that great. Even though they portray it as this easy thing to do on T.V. it is really difficult to successfully lift a good print as prints are usually smeared, and only partial prints are usually seen. By keeping this in mind, it was easier to not get my hopes up with certain items of evidence knowing I may or may not find anything. My supervisor tested me a few times telling me to find the prints when in reality there was no prints to find so that was always good to practice. I tried finding prints on a couple of fire extinguishers but because of the surface and the residue left from someone pulling the handle there was nothing to find, which again was good experience.

One of my favorite things to do was submit fingerprints into AFIS. After processing and photographing the best prints out of whatever was available, I had uploaded them and marked the ridge endings and bifurcations that I could see. With the help of the computer software, it also did its own ridge counting, which was cool, but not always correct. This was neat to see how many potential matches the database would find off just the one print I had submitted. I would still have to go through each hit individually to make sure they could be eliminated or possibly looked at with another set of eyes.

My overall experience at this internship was awesome! I really loved every minute of it especially going out on calls and processing evidence from real life scenes. This internship was always hands on and truly helpful because you simply cannot see or process certain evidence in a classroom. It is just so different when dealing with real life cases. I would recommend this internship to anyone who has a passion for forensic science and processing evidence!"

– Cheyanne Augustus, *Senior*