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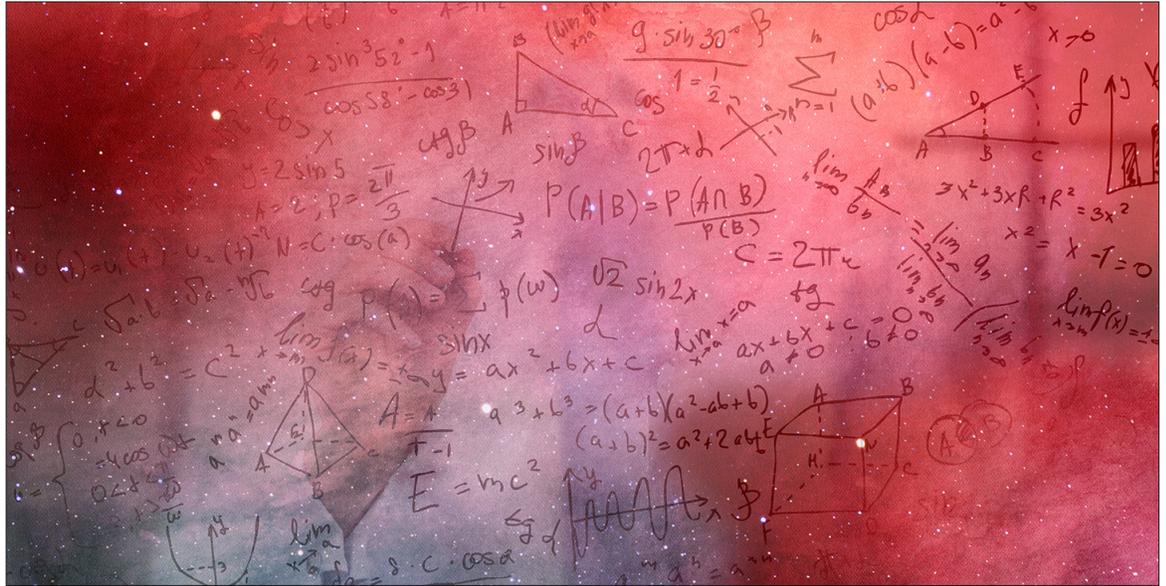
Courses are presented in partnership with the International Association for Identification.

### ADA / Special Accommodations

To ensure we can accommodate persons with special needs who wish to attend our courses, please be sure to identify the accommodation needed when you register, or if applicable, at the time you register by phone.

### Host a course

By hosting one of our courses, you will be providing your agency's personnel and the forensic professionals in your area with a high-quality training opportunity, right in your local area. This means less cost to you or your agency for expenses such as travel, lodging, and meals, and less time away from home and family. Plus, hosts can qualify for tuition savings. For more information, visit [tritechtraining.com](http://tritechtraining.com).



# Math & Physics for Bloodstain Pattern Analysis

## April 29 – May 3, 2019

### TUITION: \$799

### INSTRUCTORS: Brian Yamashita, Ph.D., & Fons Chafe

### LOCATION:

Montgomery County Sheriff's Office  
Clint People's Training Academy  
112 Academy Drive | Conroe, TX 77301

### LODGING INFORMATION:

Homewood Suites | 3000 Interstate 45 North  
Conroe, Texas 77303 | 936-703-6000

Room Rate: \$119 plus tax (includes breakfast and evening reception)

Booking Info: Call the hotel and request the Math & Physics room block to receive the special rate, or use the booking link available online at [tritechtraining.com/042919-MATH-PHYSICS.html](http://tritechtraining.com/042919-MATH-PHYSICS.html)

This course has been approved for 40 hours of certification/recertification training credit by the IAI Crime Scene Certification Board. Please visit the IAI Certifications page at [tritechtraining.com](http://tritechtraining.com) for additional information.



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## ABOUT TRITECH

A leader in the forensics market, Tri-Tech Forensics provides evidence collection and crime scene investigation products and training to crime labs and crime scene investigators throughout the world. With over 30 years of experience, we are the nation's most proficient developer and manufacturer of forensic kits. We are committed to providing our customers with state-of-the-art forensics products and services at affordable prices. It is our goal, through our research and development program, to continue to develop superior products and training to aid in all aspects of crime scene investigation and crime lab analysis. We know how important our products and training are to the forensics community, from investigation to prosecution. Our mission is the same as our customers – *Identify. Protect. Preserve.*

## COURSE DESCRIPTION

# Math & Physics for Bloodstain Pattern Analysis

“Bloodstain Pattern Analysis is not science.”

That is becoming a more commonly held opinion in American courtrooms today. But those uttering these words usually do not understand that Bloodstain Pattern Analysis is based on principles of physics and mathematics. The issue then becomes, how well the analyst can apply these principles on the crime scene and explain them when he or she appears in court. When you do Bloodstain Pattern Analysis, do you really understand these principles or are you just filling in the blanks in a preprinted formula?

This course will introduce the student to the mathematical theory behind the formulae used to determine the origin of blood sources and the scientific principles that dictate the motion of blood. Successful completion of this course will enable the student to analyze and interpret bloodstained crime scenes more effectively and

will give the student essential tools to become a better expert witness when testifying about Bloodstain Pattern Analysis. Hands-on exercises will be utilized to reinforce principles learned in the classroom and will include instruction in the use of the HemoSpat® computer program for Bloodstain Pattern Analysis.

### Prerequisite

Attendance at a 40-hour basic bloodstain pattern analysis course is required for attendance at this course.

### Additional Requirement

Students are required to bring a laptop computer (Mac OS X 10.9-10.10 (64-bit Intel), or Windows 7/8/8.1) and a scientific calculator. (Smart phone scientific calculator apps are acceptable in place of stand-alone calculators.)

## COURSE INSTRUCTORS

### Brian Yamashita

Brian Yamashita was born and raised in Winnipeg, Manitoba, Canada. He received a B.Sc. (Hons.) Degree in Chemistry from the University of Manitoba, and a Ph.D. in Physical Chemistry from the University of Western Ontario in London, ON. He was a Killam Postdoctoral Fellow at Dalhousie University, a Chemistry Instructor at the University of Victoria, and a Research Associate with Atomic Energy of Canada before joining the Royal Canadian Mounted Police (RCMP) in 1989. He currently works as a research scientist in Integrated Forensic Identification Services in Ottawa, doing research and development work in forensic science, with an emphasis on forensic identification. He has authored or co-authored over 40 papers in the physical chemistry and forensic science literature and has lectured extensively on chemical development of fingerprints and the use of forensic light sources, the application of the Scientific Method to forensic science, and bloodstain pattern analysis. He is a member of the IAI, IABPA, CIS, CIC, and CSFS. He is on the Editorial Board of the Journal of Forensic Identification, and is the Editor of the Canadian Society of Forensic Science (CSFS) Journal.

### Fons Chafe

Fons Chafe was born and raised in Gander, Newfoundland, Canada. He received B.A., B.Ed., B.Sc. (mathematics) and M.Ed. degrees from Memorial University. He was a police officer in Edmonton, Alberta, Canada for 25 years and was a member of the crime scenes investigation unit. He has been qualified as an expert witness in bloodstain pattern analysis, crime scene investigation, and fingerprint examination in Canadian courts. He currently works as an assistant professor in the Police and Investigation Studies program at MacEwan University.