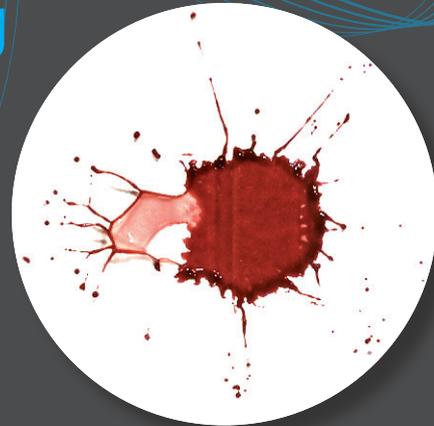


THE FLUID DYNAMICS OF BLOODSTAIN PATTERN FORMATION

advanced BPA training



This 40-hour course will give bloodstain pattern analysts an understanding of the basic principles of fluid dynamics as they apply to bloodstain pattern formation.

What you will learn

Our aim for the course is to help bloodstain pattern analysts develop greater interpretative skills. We explore the connections between the physical mechanisms that cause blood to leave the body and the characteristics of static bloodstain patterns. We look closely at the properties of blood as a fluid and the physics of blood droplet behaviour.

After this course you will be able to:

- describe and explain the critical physical properties of fluids
- describe and demonstrate the differences between blood and other common fluids and how that relates to Bloodstain Pattern Analysis
- explain the underlying physical mechanisms of the formation of major bloodstain types
- relate the observed characteristics of the major bloodstain pattern types to the underlying mechanisms of their formation
- use video bloodstain pattern analysis source material in the presentation of court evidence or in basic bloodstain pattern analysis training.

Our approach

We take a practical, hands-on approach. You will work in small groups on a set of experiments, using a high speed camera to capture bloodstain patterns.

Groups will review and analyse experimental data, and prepare and present presentations to the class describing the results. You will practice making connections between the dynamics of pattern formation and the features of the resultant static bloodstain pattern.

There will also be lectures and class discussions about the principles of fluid mechanics that will help you gain higher-level interpretative pattern recognition skills.

Pre-course assignment

Some pre-course work, including refresher training on some basic maths and physics, is required before the course starts.

Course assessment

There are three parts to the course assessment:

1. Completion of a practical workbook
2. An oral presentation made on the final day of the course
3. An open-book, written exam on the fundamentals of fluid dynamics

For more information contact:

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WHAT OUR COURSE GRADUATES HAVE SAID:

"... any serious person involved in BPA should take this course"

"... puts science back into forensic science"

"This course should be mandatory..."

