NATS 7004 BLOOD DISTRIBUTION AND SPATTER

Credit Points 10

Legacy Code 301149

Coordinator Chris Lennard (https://directory.westernsydney.edu.au/search/name/Chris Lennard/)

Description This unit will provide an in-depth review of the principles of blood spatter creation, and blood stain interpretation as it pertains to biological evidence. This unit is taught by the University of Florida as part of a collaborative venture between the University of Florida and Western Sydney University. Note: Further information on this unit is available from the University of Florida.

School Science

Discipline Forensic Science

Student Contribution Band HECS Band 2 10cp

Level Postgraduate Coursework Level 7 subject

Restrictions

Students must be enrolled in 3741 Master of Forensic Science, 3742 Graduate Diploma in Forensic Science or 3743 Graduate Certificate in Forensic Science.

Learning Outcomes

On successful completion of this subject, students should be able to:

1. To understand the function of blood spatter interpretation in crime scene reconstruction
2. To be familiar with the terminology used routinely in blood spatter interpretation
3. To understand the function and structural differences of specified components of the circulatory system
4. To understand the physiological mechanisms initiated when the circulatory system is breached or damaged
5. To know the physical and chemical nature of blood
6. To understand the physical forces that are involved in the flight and droplet dynamics of blood
7. To understand the geometric parameters used to determine the angle of impact of blood
8. To understand the parameters involved in determining directionality of blood spatters
9. To understand the means of determining the point of convergence and the point of origin of blood staining
10. To know the identifying characteristics of different types of bloodstains
11. To understand the importance and methods of crime scene documentation and reconstruction
12. To understand the legal and forensic implications of blood spatter interpretation and the limitations of data interpretation for courtroom testimony

Subject Content

Module 1 Blood stain pattern analysis
Module 2 Hemodynamics and Blood as a medium
Module 3 Motion and directionality
Module 4 Point of convergence and point of origin
Module 5 Impact spatter blood stains
Module 6 Characteristic blood patterns
Module 7 Documentation and crime scene reconstruction
Module 8 Legal and forensic implications

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Item	Length	Percent	Threshold	Individual/ Group Task
Final Exam	Not specified	100	N	Individual

Prescribed Texts

- Principles of Bloodstain Pattern Analysis: Theory and Practice (Practical Aspects of Criminal & Forensic Investigations) May 26, 2005 by Stuart H. James (Author), Paul E. Kish (Author), T. Paulette Sutton (Author) ISBN-13: 978-0849320149 ISBN-10: 0849320143 Edition: 3rd

Teaching Periods

Uni of Florida/Canberra-Term 1

Online

Online

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View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=NATS7004_22-FT1_ON_O#subjects)

Uni of Florida/Canberra-Term 2

Online

Online

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View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=NATS7004_22-FT2_ON_O#subjects)