

## SEMESTER I

### LSM1306 - Forensic Science

**Prerequisite:** None.

**Preclusion:** None.

#### **Module Description**

Crime is one feature of human behaviour that fascinates our community. How crimes impact our society and the way in which crimes are investigated and solved in the Singapore context is the focus of the module. The module is designed to enable students to appreciate why and how crimes are committed in Singapore, to understand how crimes are solved in Singapore using investigative, and the latest scientific and forensic techniques, and to learn the role of the major stakeholders in the Criminal Justice System. Experts from law, the Health Sciences Authority and the Singapore Police Force will cover topics related to forensic science. The main topics include an introduction to the laboratory set-up of the Centre for Forensic Science, which handles DNA profiling, testing of body fluids and blood, paternity testing and database information; death investigation by the Centre of Forensic Medicine; handwriting analysis and questioned documents, toxicology and identification of illegal drugs. Students will complete this module with a rare insight into the Criminal Justice System; and appreciate and understand how the Criminal Justice System influence and impact our society.

S/N	Topics	Lecture hours/ Lecturer
1	Introduction to Forensic Science	1.5 [ST]
2	Development of Forensic Science in Singapore Cases	1.5 [EL]
3	Genetics, Serology & Forensic DNA	1.5 [ST]
4	Registration of Criminals Act & DNA database	1.5 [EL]
5	Blood Spatter Analysis	1.5 [ST]
5	Singapore CSI	1.5 [LPP]
6	Drugs of Abuse	1 [ST]
7	Forensic Analysis of Fingerprints	1.5 [EL]
8	Forensic Entomology and Terrorism Forensics	3 [NNK]
9	Human and Animal Hairs	1 [EL]
10	Practical Exam briefing	1 [ST]
11	Practical Exam (lab component on fingerprint)	1 [ST]
12	Pattern Matching	1 [EL]
13	Case Study on Video	1 [EL]
14	State Coroner	1 [ST]
15	National Academy of Science Report	1 [ST]
16	Forensic Odontology	1 [Guest Lecturer]
17	Criminal Minds: Forensic Psychology	1 [Dr. M. Khader]
18	Analysis of Tool marks & Firearms	3 [EL]
19	Dead Men do Tell Tales: Forensic Pathology (Part I)	1.5 [TES]
20	The Role of the Health Sciences Authority	1.5 [ST]
21	Dead Men do Tell Tales: Forensic Pathology (Part II)	1.5 [TES]
22	Law of Evidence (Part I & II)	1.5 [ST]
23	Mass Disaster Victims Identification	1.5 [TES]
24	Exam Revision and Conclusion	3 [ST]
		Total Lectures: 36 h Practical: 3 h
Total hours		<b>39 h</b>

#### **MODE OF CLASS:**

Three lectures from 7.00pm to 10.00pm.

**MODE OF ASSESSMENT:**

- 30% Continual Assessment
- 20 % Practical exam on fingerprint dusting and report writing (Individual Report)
- 50% Final Examination (100 MCQ Questions)

**REFERENCES:**

Andrew, R.W. Jackson & Julie M. Jackson. 2011. Forensic Science. 3rd Edition. Pearson Education Limited. ISBN-13: 978-273-73840-4

Lee, H.C. & Howard A. Harris. Physical Evidence in Forensic Science. 3rd Edition. Lawyers & Judges, Publishing Company, Inc. ISBN: 1-936360-01-2

**MODULE CO-ORDINATOR:**

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