Liverpool John Moores University

Title:	INFORMATION ASSURANCE
Status:	Definitive
Code:	**5063COMP** (117505)
Version Start Date:	01-08-2013
Owning School/Faculty:	Computing and Mathematical Sciences
Teaching School/Faculty:	Computing and Mathematical Sciences

Team	Leader
Robert Askwith	Y

Academic Level:	FHEQ5	**Credit Value:**	24.00	**Total Delivered Hours:**	74.00
Total Learning Hours:	240	**Private Study:**	166		

Delivery Options
Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	24.000
Seminar	24.000
Tutorial	24.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Security analysis and risk assessment	50.0	
Exam	AS2	Examination	50.0	2.00

Aims

To provide a detailed understanding of the main concepts of Information Assurance.
To develop an appreciation of the process of risk analysis.
To develop an awareness of standards relating to information governance within enterprise environments, including legal compliance issues.
To gain experience in developing information assurance needs for a computer

system.

Learning Outcomes

After completing the module the student should be able to:

1 Evaluate the Information Assurance requirements within an information system.
2 Analyse risks associated with a computer system using a standard methodology.
3 Exercise significant judgment in relation to legal considerations of Information Assurance.
4 Generate an Information Assurance plan relating to a given information system.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Security analysis and risk	1	2
Examination	3	4

Outline Syllabus

Understanding information assurance: background to concepts such as information, process, risk, human factors, standards, compliance.
Security fundamentals: threats, vulnerabilities, attacks, models for security, access control, authentication. Economic and business models for security.
Information security management: risk assessment, security controls, monitoring, review, education. Emphasis on ISO/IEC 27001/5 as the UK IA standard.
Legal constraints: data protection and privacy, compliance legislation, fraud, forensic procedures.

Learning Activities

Students will participate in lectures, tutorials, and seminar sessions.

References

Course Material	Book
Author	Anderson, R.
Publishing Year	2008
Title	Security Engineering
Subtitle	A Guide to Building Dependable Distributed Systems
Edition	
Publisher	Wiley
ISBN	0470068523

Course Material	Book

Author	Humphreys, E.
Publishing Year	2009
Title	Information Security Risk Management
Subtitle	Handbook for ISO/IEC 27001
Edition	
Publisher	BSI – British Standards Institution
ISBN	9780580607455

Course Material	Book
Author	Qian, Y. et al
Publishing Year	2008
Title	Information Assurance
Subtitle	
Edition	
Publisher	Morgan Kaufmann
ISBN	0123735661

Course Material	Book
Author	Schneier, B.
Publishing Year	2008
Title	Schneier on Security
Subtitle	
Edition	
Publisher	Wiley
ISBN	0470395354

Course Material	Book
Author	Whitman, M. E. and Mattord, H. J.
Publishing Year	2010
Title	Management of Information Security
Subtitle	
Edition	
Publisher	Course Technology
ISBN	1435488849

Notes

The term Information Assurance generally refers to the wide range of activities that information security practitioners engage in, although typically excludes development of solutions through software development. In this module the focus is on the management and information governance aspects of being an IA practitioner.