Liverpool John Moores University

Title:	Theory of Cloud Computing
Status:	Definitive
Code:	**7503DBSTHC** (118791)
Version Start Date:	01-08-2011

Owning School/Faculty: Liverpool Business School
Teaching School/Faculty: Dublin Business School

Team	emplid	Leader
Alistair Beere		Y

Academic Level:	FHEQ7	**Credit Value:**	15.00	**Total Delivered Hours:**	38.00
Total Learning Hours:	150	**Private Study:**	112		

Delivery Options
Course typically offered: Semester 1

Component	Contact Hours
Lecture	24.000
Tutorial	12.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1		50.0	
Exam	AS2		50.0	2.00

Aims

The module provides the theoretical context for study of the emerging area of Cloud Computing . There is a critical appraisal of the key drivers and potential pitfalls of Cloud Computing , along with exploration of the consequences of deploying computer services in this way.
1.To understand and appraise the philosophy, concept and role of Cloud Computing in modern business environments
2.To evaluate the drivers of Cloud Computing how these drivers are shaping IT department activities

3.To critically appraise and evaluate the strategic importance of Cloud technologies in managing business IT infrastructures and services
4.To effectively appraise and manage the risks associated with Cloud Computing

Learning Outcomes

After completing the module the student should be able to:

LO1 Appraise and discuss the nature of Cloud Computing in the context of business IT

LO2 Evaluate and inform management planning and decision-making on Cloud Computing activities

LO3 Critically evaluate and appraise the strategic role of Cloud Computing in managing business IT structures and services

LO4 Be competent to assess and appraise costs and risks associated with Cloud Computing

LO5 Critically assess the benefits of Cloud Computing for both the cloud providers and organisational clients

Learning Outcomes of Assessments

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

Group Research Project	LO 1	LO 2	LO 3	
Exam	LO 2	LO 3	LO 4	LO 5

Outline Syllabus

Cloud Computing as a paradigm
• History and precedence of Cloud Computing
• How the cloud can act as a innovative influence on business
• Ownerships of clouds, private, public and hybrid

Costs of Cloud Computing
• Affordability for SMEs through multinationals.
• Total cost of ownership issues for the organisation
• Hidden costs of the cloud
• Cost evaluation over the lifecycle of individual services in the cloud
Benefits of Cloud Computing to the Organisation
• Ubiquitous access and unprecedented agility
• Efficiencies in scalability
• Ability to match available services to expected / future demand
• Productivity & efficiency gains in service provision
• Freedom from managing technological obsolescence and upgrades
• Improved budgeting

Overview of Service providers,
* *Google, Microsoft, Amazon, Yahoo, IBM, EMC/VMware, Salesforce.com*
* *Evaluating services from potential cloud suppliers*
* *Making a business case for cloud services*

Security, ethical and legal issues
* *Risk of market dominance or monopolistic behaviour from cloud providers*
* *Privacy and confidentiality of the organisations' data in the cloud*
* *Impact of cloud service outage on the organisation*
* *The cloud and net neutrality*
* *Regulatory concerns, and limitations*

Strategic value of the IT department
* *Outlining the organisation's strategic direction*
* *Change management and the IT department*
* *Overcoming Resistance to the Cloud*
* *Increased business value of the IT department*

Planning & strategy
* *Decision making prior to embarking on the cloud*
* *Payment negotiations and plans*
* *Management of the cloud provider*
* *Provisioning individual client requirements*
* *Locus of control with cloud providers*

Learning Activities

Classes will take place in traditional lecture format with built-in group and pair-work to aid discussion and debate.

References

Course Material	Book
Author	Michael H. Hugos,
Publishing Year	2010
Title	Business in the Cloud: What Every Business Needs to Know About Cloud Computing
Subtitle	
Edition	
Publisher	Wiley
ISBN	

Course Material	Book

Author	Dimitris N. Chorafas
Publishing Year	2010
Title	Cloud Computing Strategies
Subtitle	
Edition	
Publisher	CRC Press
ISBN	

Notes

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