Module Details

Module Code:	PROG C7Z22
Full Title:	Introduction to System Administration APPROVED
Valid From::	Semester 1 - 2019/20 (June 2019)
Language of Instruction:	English
Duration:	1 Semester
Credits::	5
Module Owner::	Amanda Clancy
Departments:	Unknown
Module Description:	Students will install, configure and setup servers and their services in both Linux and Windows. In addition, they will perform basic configuration tasks using GUI and scripting.

Module Learning Outcome	
On successful completion of this module the learner will be able to:	
#	Module Learning Outcome Description
MLO1	Examine the main principles of System Administration and the main tasks of a system administrator.
MLO2	Show knowledge of server configuration requirements in Linux and Windows and how to monitor resources
MLO3	Examine and recognize typical services running on a server.
MLO4	Install a server in a Type 2 hypervisor environment
MLO5	Perform basic configuration tasks on a server using both GUI and scripting

Pre-requisite learning
Module Recommendations   *This is prior learning (or a practical skill) that is strongly recommended before enrolment in this module. You may enrol in this module if you have not acquired the recommended learning but you will have considerable difficulty in passing (i.e. achieving the learning outcomes of) the module. While the prior learning is expressed as named DkIT module(s) it also allows for learning (in another module or modules) which is equivalent to the learning specified in the named module(s).*
No recommendations listed

Module Indicative Content
Understand the main principles of System Administration
Students will examine of the importance of System Administration in a business. Evaluating Systems Administration tasks and the main principles of system administration (desktops, servers, services, security, disaster recovery)
Server configuration requirements
Install setup and configure both Windows and Linux servers. Look at tasks such as monitoring, updating, patching and backups. Understand how to troubleshoot server issues.
Gain knowledge of typical services running on a server.
Become familiar with services, roles and features of a server. Basic network configuration, file system management and user management
Install a server in a Type 2 hypervisor environment
Install an OS on a type 2 hypervisor and gain a basic insight into how they work.
Scripting to perform system administrative tasks.
Become familiar with Powershell, BASH and command line tools to manage files, users and network settings on a server.

Module Assessment

Assessment Breakdown	%
Course Work	30.00%
Practical	70.00%

Module Special Regulation

Assessments

Full Time On Campus

Course Work			
Assessment Type	Class Test	**% of Total Mark**	30
Marks Out Of	0	**Pass Mark**	0
Timing	Week 13	**Learning Outcome**	1,2,3,4,5
Duration in minutes	0		
Assessment Description			
In class test on theory covered in the module			

No Project

Practical			
Assessment Type	Practical/Skills Evaluation	**% of Total Mark**	70
Marks Out Of	0	**Pass Mark**	0
Timing	Every Week	**Learning Outcome**	2,3,4,5
Duration in minutes	0		
Assessment Description			
In Lab practical work documented each week and to incorporate a small project and lab exams			

No Final Examination

Part Time On Campus

Course Work			
Assessment Type	Class Test	**% of Total Mark**	30
Marks Out Of	0	**Pass Mark**	0
Timing	Week 13	**Learning Outcome**	1,2,3,4,5
Duration in minutes	0		
Assessment Description			
In class test on theory covered in the module			

No Project

Practical			
Assessment Type	Practical/Skills Evaluation	**% of Total Mark**	70
Marks Out Of	0	**Pass Mark**	0
Timing	Every Week	**Learning Outcome**	2,3,4,5
Duration in minutes	0		
Assessment Description			
In Lab practical work documented each week and to incorporate a small project and lab exams			

No Final Examination

Reassessment Requirement
A repeat examination
Reassessment of this module will consist of a repeat examination. It is possible that there will also be a requirement to be reassessed in a coursework element.

Module Workload

Workload: Full Time On Campus

Workload Type	Contact Type	Workload Description	Frequency	Average Weekly Learner Workload	Hours
Lecture	Contact	No Description	Every Week	1.00	1
Practical	Contact	No Description	Every Week	3.00	3
Independent Study	Non Contact	No Description	Every Week	2.00	2
Directed Reading	Non Contact	No Description	Every Week	2.00	2
				Total Weekly Learner Workload	8.00
				Total Weekly Contact Hours	4.00

Workload: Part Time On Campus

Workload Type	Contact Type	Workload Description	Frequency	Average Weekly Learner Workload	Hours
Practical	Contact	No Description	Every Week	3.00	3
Independent Study	Non Contact	No Description	Every Week	2.00	2
Directed Reading	Non Contact	No Description	Every Week	3.00	3
				Total Weekly Learner Workload	8.00
				Total Weekly Contact Hours	3.00

Module Resources

Recommended Book Resources

    O'Reilly Media, Inc. (2009), Essential System Administration, 3rd Edition, [ISBN: 0596003439].

    Matthew Stone. Getting Familiar with Windows Server 2016 Administration, [ISBN: 9781788839846].

This module does not have any article/paper resources

Other Resources

    Website, Microsoft Technet,
    https://technet.microsoft.com/en-ie
    Website,
    https://forum.linuxfoundation.org/catego ries/linux-system-administration