ROBERT GORDON UNIVERSITY ABERDEEN

This Version is No Longer Current
The latest version of this module is available here

MODULE DESCRIPTOR

Module Title

Programming For System Administrators

Reference	CM3123	Version	1
Created	April 2017	SCQF Level	SCQF 9
Approved	August 2017	SCQF Points	15
Amended		ECTS Points	7.5

Aims of Module

To provide the student with the fundamental programming skills required to effectively manage and support networked systems in both industrial and commercial environments.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

1	Implement effective interconnections between system programs.
2	Demonstrate an understanding of fundamental programming concepts.
3	Describe operating systems architecture, functionality and facilities.
4	Design and implement scripts for network connectivity and information management.
5	Test and critically evaluate software solutions.

Indicative Module Content

Software/Library installation and configuration Fundamental programming concepts Network programming and interfacing with APIs Linux operating systems programming and interacting with the OS Administration interfaces (Command line, web, applet, windows) Automation (scripting).

Module Delivery

Key concepts are introduced and illustrated through lectures and directed reading. The understanding of students is tested and further enhanced through interactive tutorials. In the laboratories, the student will progress through a sequence of exercises to develop sufficient knowledge and skills in the subject area.

Indicative Student Workload	Full Time	Part Time
Contact Hours	36	N/A
Non-Contact Hours	114	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	N/A
Actual Placement hours for professional, statutory or regulatory body		

ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

Component 1

Type:	Coursework	Weighting:	100%	Outcomes Assessed:	1, 2, 3, 4, 5
Description:	Coursework worth 100% of total module assessment				

MODULE PERFORMANCE DESCRIPTOR

Explanatory Text

The calculation of the overall grade for this module is based on 100% weighing of C1. An overall minimum grade D is required to pass the module.

Module Grade	Minimum Requirements to achieve Module Grade:
A	The student needs to achieve an A in C1.
B	The student needs to achieve an B in C1.
C	The student needs to achieve an C in C1.
D	The student needs to achieve an D in C1.
E	The student needs to achieve an E in C1.
F	The student needs to achieve an F in C1.
NS	Non-submission of work by published deadline or non-attendance for examination

Module Requirements

Prerequisites for Module	None.
Corequisites for module	None.
Precluded Modules	None.

INDICATIVE BIBLIOGRAPHY

1	LUTZ, 2013. Learning Python. 5th edition. O'Reilly.
2	BEAZLEY & JONES, 2013. Python Cookbook. 3rd edition. O'Reilly.
3	RHODES & GOERZEN, 2014. Foundations of Python Network Programming. Apress.
4	SARKER, 2014. Python Network Programming Cookbook. Packt Publishing.
5	SARKER, 2016. Learning Python Network Programming. Packt Publishing.